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RUSSIAN FOOD

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FOOD, or rather the lack of it, is the outstanding conversational theme of all recent American visitors to Russia. In the present period of abnormal privation it is difficult for such travelers to observe the normal food habits in Russian homes, or to realize that even in times of plenty Russian customs regarding food were quite different from American customs. Few Americans visited Russia before the Revolution, and still fewer ever went outside of Moscow and St. Petersburg to see the living conditions of the peasants, who, then as now, made up the great majority of the population.

Since so little has been written on this phase of Russian life, it has seemed timely to describe what I saw of Russian food habits in three visits to that country between the years 1917 and 1927. Appropriately, each of the visits was connected with the feeding of certain portions of the population, the first mission having been in connection with medical and feeding stations for war refugees; the second with famine relief; and the third with teaching the essentials of a better diet for babies than the "sugar teats" and cucumbers that the peasant mothers have traditionally forced upon their infants. Except during the famine years, the observations covered periods when food conditions were normal. Even in such times, however, one must distinguish between the food used by the eighty-five per cent of the population who belonged to the peasantry or factory workers, and the fifteen per cent whose taste had been more widely educated and who could afford to buy what their tastes suggested.

To the first group bread was, and still is, the great staple food; in no other country at the present time is bread so completely the "staff of life" as it is in Russia. A pound a day per person is the minimum which will satisfy the members of the mudjik's family; he himself will expect more than that. In the old days, just as at present, wheat was grown for export, and the masses of the people lived on heavy, dark brown, round

rye loaves, soggy in the center and with an acid taste, unpleasant at first but on further acquaintance very satisfying. Russian soldiers have told me that they could march indefinitely on a ration of this rye bread alone, whereas with wheat bread, unless it was supplemented by cabbage soup, they quickly developed scurvy.

The ordinary breakfast of a poor family consisted of bread and tea. A piece of bread was usually taken to work and munched on throughout the day, moistened by tea provided by the employer of office workers, or by kvas or some other home brew of those who worked their own fields. Dinner came in the late afternoon when the day's work was finished. This meal began and usually ended with bread and soup, but the latter was an exceedingly nourishing dish, often partaken of by the whole family from a single bowl. Large pieces of meat formed the stock, to which was added cabbage to make the famous Russian *stchee*, or red beet juice to make the equally famous *borstch*. The peasant seldom prepared meat in any other way than as a component of soup; very few, aside from those trained as house servants, knew how to carve a cow or sheep into roasts and chops. Several other vegetables were and are often added to the soups: onions, potatoes, carrots, turnips. Dried mushrooms are frequently used to give a spicy flavor. Salted cabbage, similar to sauerkraut, is prepared especially for the long winters when fresh vegetables are non-existent. Cucumbers are eaten almost continuously; in the summer, raw, skin and all, like apples, and in the winter salted like cabbage. With this catalog one comes to an end of the usual Russian vegetables. The dwellers in cities have encouraged market gardens with peas, beans, tomatoes, and lettuce, but these more delicate foods are the result of foreign influence and are not well known throughout the country districts.

Nor are milk and butter so much used as in many other countries. The Russian peasant women nurse their babies until they are old enough to be weaned to adult food, and seldom expect to give them cow's milk. The village cows are of poor stock and poorly fed, so that milk does not contain much butter fat. Sour milk preparations, however, are very popular. It was from the Slav peasants that Metchnikov received the hint which led to his theory of the value of fermented milks in combating intestinal infections. The most usual fat in the Russian peasant's diet comes from the kernel of sun-flower seeds. These are to him what chewing-gum is to the American; all day long he will crack the seeds and extract the tiny morsel of nourishment within them, leaving in his wake a trail of husks with which no housewife can cope. Decrees have been

passed forbidding the eating of sun-flower seeds in public buildings and even on certain streets, because of the inevitable accompanying untidiness; but, in spite of official disfavor, it is true that sun-flower seed oil has often been the only possible source of fat in the Russian diet.

Berries and fruit and several excellent varieties of melons are in use during the summer, but since there are no cold storage plants and no refrigerator cars, the season for these delicacies is short. Fruit is seldom preserved, but is often dried and used as a compote in the winter months. When sugar is not too expensive some fruits are also made in delicious sirupy jams. A curious Russian custom is to substitute these rich jams for sugar in tea.

Tea is, of course, the universal Russian beverage, and the purr of the boiling samovar in the making of it has become the Russian synonym for hominess and hospitality. It is incorrect, however, to suppose that tea is actually made in the samovar; the "self-boiler," as the word may be literally translated, merely heats the water; the tea is made in a diminutive tea-pot, and then poured into glass tumblers. So many glasses of this weak tea are consumed by the average Russian at one sitting that they name their samovars as "one man size," "two man size," and so on.

Vodka is another widely used Russian drink, although women are seldom seen drinking it. From time immemorial it has been a governmental perogative to make and sell vodka, with much resultant profit in immediate revenue and loss in industrial and commercial wealth. To fulfill the legal requirements this vodka must contain at least forty per cent of alcohol, and the alcohol content of the more expensive varieties runs up to sixty-five per cent. There is no pleasure in the taste of this fiery liquid, which is tossed down quickly rather than sipped. Its great value lies in its power to produce rapid and complete intoxication in the drinker. Other fermented drinks which may be brewed at home are kvas, made from apples, cherries, or pears, kumyss, made from mare's milk and reputed to have great medicinal value to the tuberculous; mead, made from honey; and various wines especially popular in the Caucasus and the Crimea.

In general, the diet of the majority of the Russian people even in times of plenty would seem very monotonous to the average American. To us there seems much lack of variety both in the actual items of food and also in the methods of preparation. The scientifically trained nutritionist, however, will recognize in this tiresome succession of bread and soup and clotted milks all of the necessary ingredients of a well balanced diet. Certainly the adult Russian is a sturdy individual of more than usual

strength and endurance. I remember once seeing a stevedore walk up the street with an upright piano strapped to his back; this was perhaps a somewhat unusual performance, but the strength of the gangs of men who loaded and unloaded our famine relief products was a continual surprise.

It would be unfair, however, to leave the impression that among the more favored groups in Russia no appetizing dishes had originated. On the contrary, they had a reputation for enjoying rich and exotic foods, Moscow in particular boasting restaurants famous for menus of long and intricate preparation. Breakfast might be the usual matter of tea and bread, but luncheon and dinner were sure to be elaborate.

Dinner began with a great variety of *zakuskas* or hors d'oeuvres, among which one found black or amber caviar served with scullions or lemon, salted raw red herring, smoked goose or salmon, radishes, various kinds of cheese, and sweet pickled pears. With these would appear vodka in tiny crystal glasses or a strong black current wine. Following this course came a soup, perhaps the humble bortsch or stchee enriched with a tablespoonful of cold clotted cream. There was also a popular green sour grass soup served cold, and an expensive fish soup something like the best of our chowders. With the soups were served hot individual meat pastries very richly flavored and very good. Or there might be a separate course of tiny boiled dumplings filled with finely chopped meat and served with melted butter and clotted cream (see recipe beyond). The main meat dishes much resembled what we have in America, although wild fowl and wild hare appeared more often. Roast turkey, roast goose, and roast suckling pig were popular, either hot or cold. Roast mutton stuffed with buckwheat was a dish not so well known outside of Russia. Vegetables and salads have never been popular in Russia except with those whose tastes have followed foreign influence. For desserts, melons, fruit, and water-ices were served, with an occasional rich pudding of gelatine, potato flour, and candied fruits. Little fancy cakes with heavy icings and fillings might appear and sometimes wafer-thin pan-cakes accompanied by jams, melted butter, and whipped cream. Coffee and wines were usually imported for these sophisticated diners.

Just as the Russian peasant diet seems to us meager and uninteresting so does the foregoing menu seem over-rich and indigestible. In its food habits, as in so many other phases of its life, old Russia was a country of extremes, productive of unbalanced and warped points of view. Among the favorite dishes of the wealthier Russians, however, there were several which can occasionally be very pleasant to American palates. The following four recipes have so proved themselves.

EASTER CHEESE

This very rich cheese is prepared during the last week in Lent and is eaten on Easter morning as part of the general rejoicing at the end of the long fast prescribed by the Russian Orthodox Church.

6 egg yolks
1 tumbler sugar
½ pint heavy cream
1 lb. fresh cream cheese
½ lb. butter
Chopped blanched almonds, candied citron, lemon or orange peel, maraschino cherries or raisins, according to taste.

Beat the egg yolks and sugar together until white and frothy. Whip cream until thick and beat butter until creamy. Beat the egg yolks and sugar into the cheese, add the butter and beat again. Add the whipped cream and beat again. Add the almonds, citron, and other fruit. Wrap in cheese-cloth and place in ice-box under heavy weight for 24 hours. Then pack solidly for several hours in a mold, traditionally a wooden four-sided pyramid with the Greek cross on two sides and flowers on the other two. Remove from mold, slice, and serve on sweet rusk.

BOILED MEAT DUMPLINGS

1 lb. beef
1 lb. lamb
1 lb. pork
1 lb. horse meat

Chop these four meats very fine in a large bowl with onions, salt, pepper, and leaf lard. Make a dumpling pastry from flour, lard, and water; roll very thin and cut into circles about the size of a silver dollar. Place a small teaspoonful of the chopped meats in each pastry, fold over, and pinch edges together. Drop into boiling water for about four minutes. Remove and serve immediately with melted butter and whipped cream.

The usual restaurant order of these was fifty for one person.

WATERMELON JAM

Cut the red meat of a ripe, but not over-ripe, watermelon into cubes about 1½ inches on each side. To 3 pounds of watermelon add 2 pounds of sugar. Boil over slow fire for about 2 hours. Add a lemon cut into slices and boil for another 20 minutes. Turn out into jelly glasses.

SHASHLEEK

This is a dish originating among the mountain tribes in the Caucasus and should be prepared out of doors over an open fire. One needs long steel skewers (tradition calls for outworn sword blades) which stretch across a fire and rest in grooves on either side so that they may be easily rotated.

Stick on each skewer in succession until it is filled: a piece of fat lamb meat, a tomato, an onion. Rotate skewer over fire for about 15 minutes, tipping it if possible so that the juices of each ingredient run over the next. Serve immediately.

THE WHITE HOUSE CONFERENCE AND HOME ECONOMICS

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A STUDY of the family environment in the interest of child life and the best welfare of the family is not new to progressive home economists. Now the White House Conference comes with findings and recommendations as a challenge to the group. It asks, what has the White House Conference to give to the field of home economics and, conversely, what has home economics to give to the family?

Concerned much with the study of environmental conditions, home economists were placed on White House Conference committees to determine what effect nutrition, the management of housing, of income, time, and energies of the homemaker have upon the health and protection of children. The study in which these committees engaged was protected from interruption until the White House Conference in November, 1930, when the findings were offered. Since then, the time required for completing reports and editing and publishing them has delayed possibility of offering something definite upon which to work. The first single report ready in book form is called *The Child and the Home*—and is the report of the committee on housing and management.

The housing committee was made up largely of architects interested in the social effect of the house on family life. The Children's Charter sets forth this tenet, "For every child a dwelling place safe, sanitary, and wholesome, with reasonable provisions for privacy, free from conditions which tend to thwart his development; and a home environment harmonious and enriching." Planning the house for the health, safety, and welfare of the child led the committee to try to determine what features in the house were built with the welfare of the child in mind and what features should be considered in relation to children. It might be considered that this study is of value only to those who are to build new houses. But not so; many houses we are living in today were built for another generation when social demands and the domestic and industrial life of the family were entirely different. New houses are being built;

old houses, renovated; and many houses can be modified more nearly to satisfy the requirements for child life.) The following is a summary of recommendations made by the committee on housing:

Although the house and its surroundings are the chief physical environment of the child, scores of thousands of dwellings throughout the United States are below any reasonable minimum standard and most of the remainder may well be improved so as to serve more fully the needs of the child in the maintenance of health, protection of life, the moral growth.

All groups connected with the Conference should bear in mind the importance of improving home environment as an indispensable factor in realizing their aims.

Means of informing parents and public and private agencies for social welfare should be carefully promoted and cultivated, with recognition of the value of discussion programs, contests and exhibits. Demonstration of well-built, well-designed and carefully-equipped homes, directed by disinterested, non-commercial committees representing civic agencies, home economists, architects, and other specialists in one phase or another of housing, have proved especially valuable.

Local home information centers under competent disinterested auspices should be encouraged as a means of providing parents at all times with the best available information relating to all phases of home improvement and as a center also for classes for adult education in home care of children.

The importance of continuous local program for home improvement under local initiative and self-government is recognized. Endowed research in this field and dissemination of findings and of advice to local committees and stimulation of local activities by endowed organizations nation-wide in scope would supplement and render more effective the research and informational services of the departments of Federal and State Governments concerned.

The President's Conference on Home Building and Home Ownership is urged to have a committee representing home economists and specialists in child welfare and in housing.

This committee is to draw up recommendations for instruction on housing in civics classes and home economics classes of public schools and colleges, and consider preparation of text-books and syllabi for such instruction.

Housing needs of children should be taken into consideration by all committees of the President's Conference on Home Building and Home Ownership with a view to the discovery of the most practical means of eliminating factors that injure the health and thwart the development of children. Means and policies that aid such development should be promoted.

Older urban areas which are likely to be used in the future as residence districts should be reconditioned and brought up to standard. Obsolescent and inadequate types of rural housing should also be brought up to standard in the ways that are practical.

Adequate attention to housing should be paid by appropriate departments of the state and municipal governments.

The optimum standards—for housing which the Sub-committee on Housing drafted with reference to the health, protection, development and welfare of children—are submitted as objectives.

Miss Winifred Moses of the editorial office of the White House Conference has prepared a study outline of the housing report which is available on request in mimeograph form. It is supplementary to the report printed in the volume entitled *The Home and the Child*, and it is intended to help those who are engaged in teaching housing and management as well as to be a guide to study club groups.

Home economics workers were included generously in the formation of subcommittees, and the studies resulting from their work should emphasize that housing is comparable with foods and with clothing in importance to home economics.

The subcommittee on furnishing considered the social, physical, and mental development of children of all ages as influenced by the furnishings of the home:

As a member of the family each child has a right to have his interests considered in the selection and arrangement of the furnishings of the home. Selections of the furnishings and equipment, with each child taking a part, may become a creative and joyous experience for every member of the family.

A. Perhaps the first step in allowing a child to take part in the selection of the household furnishings is to permit him to "listen in" on the discussion which precedes the purchase of a piece of furniture or a musical instrument of interest to all the members of the family.

B. The next is to allow him to go shopping with his parents when some piece of furniture or equipment is to be bought for his own use. When a chair is to be selected for his bedroom, he may go along to the store to sit on one after another in helping to determine which is suitable for him in size and shape. As his mother decides on one of the several chairs considered, she will explain the reason for her choice; the chair is not only comfortable for him, but it is also good in design, strong in construction, and suitable in price.

C. Each experiment of this kind helps to build standards and to develop personality. It affords a chance of self-expression, develops self-confidence and creates in the child a sense of personal as well as family pride.

The following recommendations were made to meet the needs of the child:

Selection, arrangement, and use of house furnishings and equipment in relation to the needs of children should be taught in elementary and secondary schools.

There has been a general failure to recognize the fact that knowledge, experience, and imagination in those fields are necessary for success.

Educational home-making centers free from the influence of commercialism where the home-maker may study the furnishings and equipment desirable for child needs should be organized.

Frequently the home-maker has only the salesman or advertising matter to guide her in selection.

Studies should be made of possible lines of cooperation between manufacturer, distributor, architect, educator, and consumer in the field of home furnishings and equipment in relation to child needs.

Present publications on the selection of furnishings and equipment for the child's needs should be popularized.

Publication of selection, arrangement and use of household furnishings and equipment should be evaluated by means of an annotated bibliography.

Surveys should be made of homes at various income levels, with emphasis on furnishings and equipment in relation to child needs.

The full report may be secured in mimeograph form by writing to the Office of the White House Conference, United States Department of the Interior.

Other subcommittee reports covered in the book *The Home and the Child* will be discussed later in the JOURNAL. They are on the management of income, clothing, and household activities.

THE RÔLE OF HOUSEHOLD PRODUCTION IN NATIONAL ECONOMY

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THE opinion seems to be general at present that production for sale has ousted household production for the producer's own use to such an extent that it is possible for mankind to satisfy its needs chiefly by exchange. This is apparent, for example, in the following quotation from Professor Gustav Cassel's "Theoretische Sozialökonomie":

> The remainder of productive work that the individual thus undertakes on his own behalf, is relatively so insignificant that we can afford to ignore it in a study of exchange economy (Tauschwirtschaft) . . . . This implies that we assume production to have ceased the moment the products enter the consuming household.

And a Finnish supporter of Cassel, Professor E. Nevanlinna, declares that production in the home, compared with production in the community as a whole, is undoubtedly trifling. A similar view of the retrogression of household production is revealed even in a study expressly devoted to the economic problems of the home which Beatrice Strauss contributed in 1929 to *Hauswirtschaftliche Jahrbücher*.

What is the actual truth regarding production in the home? In many countries statistics are obtainable from cost-of-living investigations, with the aid of which one can calculate approximately the extent and economic value of labor in the home. The present discussion is based on the official documents of Finland, where statistical studies have been made of consumption in families of the working class, of government officials, and of the farming class.

In all three social classes investigated the largest item of expenditure is that for food. The food expenditure for farm families was worked out during the fiscal year 1927–28, in connection with a study of the returns from agriculture. In this the adult was taken as the unit of consumption, and in computing the number of adults, each person over twelve years old was counted as one, each child between two and twelve years old as 0.5, and no count was made of infants under two years old. The number

of adult units in the total agricultural population was 1,690,758, or over 16 per cent less than the number of persons. The average food cost per adult unit was found to be 3,861 Finnish marks (Fmk 1 equals about 2.5 cents), or about $96.50 a year. This included Fmk 836 for food purchased from dealers, Fmk 107 for cooking fuel, and Fmk 696 for labor spent in the kitchen on food preparation, the latter calculated at the rate of Fmk 2 (5 cents) per hour, the current average wage paid to women for general agricultural work. The total annual expenditure for food by the entire agricultural population (about two-thirds of the nation) may be calculated as 6,528 million Finnish marks, or about $163,200,000.

In calculating the cost of food for working-class families, the most recent available figures are those from the official cost-of-living study made in 1920–21, those for the study made in 1928 having not yet been given out. In this study, the so-called German scale of consumption units was used, according to which males 19 years of age and over are reckoned as 1, females of 19 years or over as 0.8; younger males as from 0.1 to 0.9, and younger females as from 0.1 to 0.7 according to age. This scale, because of the lower factors assigned to children, tends to give a lower total of consumption units than does the scale of adult units used in the agricultural study previously described. The entire non-agricultural population is equivalent to 744,520 such consumption units. The average annual food expenditure per consumption unit in working class families was calculated as Fmk 3,683 ($92.75), and in families of government officials as Fmk 4,170 ($104.25), both figures excluding meals away from home. The cost-of-living study included no record of household labor, or of the cost of fuel for cooking; but assuming their value to be similar to that found in the agricultural study, they may conservatively be set as Fmk 700 and Fmk 100, giving Fmk 4,483 ($112.75) as the total cost of food per consumption unit in working-class families. Assuming that this figure holds for the entire non-agricultural population, we find that the total cost of food for its 744,520 consumption units comes to 3,338 million Finnish marks, or about $83,450,000. Adding to this the 6,528 million Finnish marks for the food of the agricultural population we find that the cost of the year's food for the whole nation is 9,866 million Finnish marks, or about $250,000,000.

Included in this total is 1.7 billion Finnish marks for household labor in the preparation of food, but there are other household tasks performed in connection with other items of expenditure for which no allowance is made. In most families clothes, at least for the children, household linen, and bedclothing are made at home; stockings are darned; old clothes

are repaired and altered. Washing, mangling, and ironing call for much household labor, as do also house cleaning and tidying up, heating, and lighting, especially in the many dwellings still without modern equipment. The care of the sick entails much work in the home, and the care of infants yet more, though the latter, it will be remembered, are left out of account in calculating the number of consumption units. According to the views of many persons with expert knowledge, it would be far from an exaggeration—rather an under-estimate—to assume that such labor in connection with the care of the home demands as great expenditure of time as work in the kitchen, and that we may safely assign to it a value of 1.7 billion Finnish marks. Consequently, the total money value of all the labor expended on households may be estimated at 3.4 billion Finnish marks. This means 13 or 14 marks per day for each of the approximately 700,000 households in Finland.

The part played by raw materials in the other items of expenditure is, of course, much smaller than in the case of food. Nevertheless, there is consumed a certain amount of cloth, sewing materials, material for home handicraft work, fuel for heating, illuminating materials, soap and other cleaning materials, and many necessities in connection with the care of infants or the sick. Some allowance must also be made for the depreciation of household inventories. It would scarcely be overshooting the mark to set Fmk 600 per consumption unit a year as the total value of such materials. According to this cautious and conservative calculation, the value of materials used for production in this group of items corresponds, for the nation as a whole, to 1.5 billion Finnish marks. This added to the 1.7 billion which represents the value of the household labor performed by them, brings the total cost of these items of consumption to 3.2 billion Finnish marks. Adding this to the above estimate for food, we have 9.1 + 3.2 = 13.1 billion Finnish marks as the value of items of consumption upon which household production has been required.

According to the study of working-class budgets, the total consumption per consumption unit during the year 1920–21 averaged Fmk 6,441. This sum included expenditures for all the needs which are not satisfied by productive work within the household, but directly by purchase, such as meals in restaurants and cafés, tobacco, ready-made clothing, furniture, household supplies, books, education, journeys, amusements, and also life insurance premiums, taxes, and many others. For the agricultural population, an approximate calculation of total consumption is all that is possible, as the study of agricultural income provides informa-

tion only regarding food. According to a statement by an expert, Professor K. T. Jutila, food may be assumed to account for at least two-thirds of the total value of goods consumed among this class of the population, the members of which live in general on an exceedingly modest scale. The total annual expenditure per adult unit is thus about Fmk 5,800, or $145. To this must be added the cost of labor in the household, calculated in the same way as before. The entire nation consumes thus within its households at the rate of 16.8 billion Finnish marks per year. As has already been shown, productive activity within the household is required in connection with goods worth 13.1 billion, or 78 per cent of the value of the total consumption. In other words, not even a quarter of our daily needs can be directly satisfied by exchange. Three quarters of our demands on life are of such nature that their satisfaction continues even in our own time to demand productive activity within the household.

Another way of estimating the values added by household production is to consider productive services carried on outside the home by industry. According to the official Finnish statistics for retail prices in 1928, rye flour sold at 336 pennis (8.4 cents) per kilo, but rye loaves at 517 pennis (12.9 cents) per kilo, a difference of 181 pennis (4.5 cents). Fresh pork cost Fmk 18 per kilo, but cured pork Fmk 31, and so on. If, on the basis of the budgets for the different classes, we should calculate how much bread is baked in households and apply shop prices to this bread, we should at once be creating an additional value of almost 700 million Finnish marks per year through the work done by housewives.

Food in the popular eating-houses of the large cooperative society Elanto in Helsingfors costs at least Fmk 20 a person a day, showing that food taken outside is about twice as dear as in the home. If we set the value for washing and repairing clothes at home on the basis of the prices charged for such work outside, we shall arrive at much larger figures than those given in the estimates of production costs in the household. And if, for all the nursing of children and sick people done by housewives in the home, we were to add only a fraction of the cost of hired labor for such services, we should arrive at exceedingly high figures. Supposing that such a trifling task as darning stockings takes one half hour per person a week, this comes to 26 hours a year and if paid for at Fmk 2 (5 cents) an hour, the value of female labor used in the study of agricultural income, would mean an annual bill of Fmk 180,000,000 ($4,500,000) for darning the stockings of a nation of 3.5 million souls.

Thus, if we take the prices which commodities and services bring in the market as the basis of our calculations, we find our estimate of the value

of production within the household reaches a much higher figure, one perhaps twice as high as the cost values arrived at earlier.

For the most part it is the housewives themselves who create these great increases in value by their work; only a small percentage of households have domestic servants. Since the housewife receives no wages at all in terms of money agreed upon beforehand—as does the most insignificant little hired assistant—she cannot be said in this respect to have crossed the threshold into "exchange economy." As a result, the value of her work remains unnoticed by those who have "stared themselves blind" in looking at the features characteristic of economy based on purchase or barter. According to the popular idea, it is the husband who supports his wife, however industriously the wife may labor. Nevertheless, on the basis of her economic activity she, too, should undoubtedly be classed with the productive members of the community. Seen from this point of view, the estimate of a family's, and even of a nation's, income takes on quite a different appearance from what it does if we are content to consider only the phenomena of exchange economy and income received in cash.

In countries with an overwhelming percentage of industrial workers and town-dwellers, where production in the household is always less in evidence, the question is naturally not the same as in Finland. In other European countries, however, objective investigations into production within the household (of which no statistics exist) would also probably reveal that the value of this production is considerably larger than is generally believed. In proportion as the standard of living has improved and the demands of civilized mankind for comfort and hygiene and for the care of children and the sick have increased, household work has had added to it new and higher duties. Even during the present highly-developed stage of exchange economy, home production still plays an important part in the economic life of the people.

Production within the household may not, therefore, be looked down upon as a bagatelle to be ignored in economic studies. If we wish to adhere to realities and not to arbitrary intellectual classifications, we cannot regard production as having "ceased the moment that products enter the consuming households." Production continues in the majority of cases within the household until each product has reached its ultimate form and final consumption can begin. As Professor Othmar Spann of Vienna has noted in his "Tote und lebendige Wissenschaft," homes are not only sites of consumption but also important productive institutions. If we wish to give an objective and true picture of the entire economic life of

the modern community, we must take into account the vital portion of production which does not enter into exchange and which is represented today not only by agriculture but also by the activities of the individual household.

THE WESTON CAFETERIA PATENT

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CAFETERIA owners and managers, the country over, were much astonished in the early fall of 1930 to discover that a suit had been brought against a cafeteria in Alabama for infringing on a cafeteria patent. Almost none of them realized that there was a cafeteria patent and no one knew to what extent he himself might be liable for such infringement. High school and college cafeterias and churches using the cafeteria method for their food service whether for profit or for purely social affairs began to wonder whether they must give up the self-service idea or purchase a license from the patent owners which might be prohibitive in price.

Two organizations came to the front to defend the cafeteria operator: the Food Service Equipment Association, an organization of jobbers and manufacturers supplying the restaurant industry, and the National Restaurant Association, an organization of representative and progressive restaurant owners and operators (1, 2). Through the efforts of these organizations the history of the cafeteria patent was unearthed.

On June 3, 1909, Albert M. Weston of Boston, Massachusetts, applied for a patent for a "serving device for eating houses." He claimed as his invention: "1. A serving device comprising a track . . . a multiplicity of removable carrier trays adapted to fit thereon . . ." (that is, a slide rail and trays) "a multiplicity of depots arranged in sequence alongside the track, the depots being severally adapted for holding and for service of . . . foods"; (that is, a steam table and counter supplies of food) "and a way alongside the track on the other side thereof from the said sequence of depots, for persons to walk alongside while propelling trays along the track," (that is, the aisle between guard and guide rails (3).

Weston's application was rejected several times by the patent searcher on the ground that it was not a patentable device, but on resort to the Patent Board of Appeals, the patent was finally allowed on February 8, 1916. The ownership of the patent passed, probably even before it was granted, from Weston's hands to Everett E. Kent of the law firm of Mitchell, Chadwick, and Kent of Boston.

Probably the first attempt that was made to collect any fees for the use of such a device was the one made by Attorney Kent when he sent letters to the John Hancock Mutual Life Insurance Company of Boston in August, 1918, requesting that it either desist from using such a device in its employees' cafeteria or make arrangements for a license for such use (4). This attempt nearly two years after the granting of the patent was evidently unsuccessful, and little or nothing was done about it until along about 1924 or 1925 when a firm which proposed to operate "groceterias" was advised by its lawyers to obtain the patent for its own protection even though it was selling groceries and not meals. The firm did so and, in 1929, notices were sent by it to a number of cafeteria owners advising them of the patent and requesting fees for a license (5).

The groceteria evidently sold or assigned its rights eventually to someone else, for the patent is now owned by Rollandet and Stratton, patent attorneys of Denver, Colorado. This firm is the one which is making determined efforts at the present time to collect from all cafeteria operators all over the United States. Probably no high school or college cafeterias have been approached as yet, but the chances are that they will not escape.

Rights for the state of Alabama were sold to the Britling Cafeteria Company and the first suit for infringement of the patent was brought by this company against the Picadilly Cafeteria Company before the United States District Court, Northern District of Alabama, in 1930.

According to the patent laws, if one can show that a device was in general use for at least two years prior to the date of filing application for a patent, that proves unpatentability and no damages can be collected for the use of the device (5). Since Weston's application was filed June 3, 1909, proof of the use of the cafeteria idea prior to June 3, 1907, would constitute evidence. The defense in the Picadilly case felt that it did have such proof, citing, among other instances, the use of a cafeteria device by the U. S. Playing Card Company cafeteria in Cincinnati. The case was lost, however, the court finding for the Britling Company. It is the contention of leaders in the industry that the defense of the Picadilly was inadequately prepared, inasmuch as the set-up of the U. S. Playing Card Company cafeteria did not include the various features covered in the patent and because this was the only proof of prior use offered by the defense.

The decision in this case is binding on the parties to the case only, but it establishes a precedent which may influence other decisions. According to the decision in this case, all gains and advantages as well as profits

can be appropriated by the plaintiff dating back to the date of the granting of the patent in 1916 and for the life of the patent which will expire February 8, 1933. "Gains and advantages" as well as "profits" means that churches and other non-profit organizations such as industrial and school cafeterias are brought under the patent claims also (6). Court costs and the cost of accounting to determine the true value of the gains and advantages for each year of operation since 1916 would also be borne by the defendant. Accounting costs and royalties together would be prohibitive for non-profit organizations and for many of the organizations operating for profit as well.

The Britling Company also brought suit against the Morrison Cafeteria Company of Alabama. The Picadilly interests appealed their case, but both the appeal and the Morrison case were later dropped (7).

After the Picadilly decision, three of the members of the Food Service Equipment Association, feeling that further litigation might prove costly and troublesome, made a settlement with the patent holders. Under date of February 3, 1931, the Stearnes Company sent out letters to their customers saying that such settlement had been made. The following extracts are taken from the Stearnes letter: "The settlement includes a nonexclusive license to manufacture cafeteria outfits for the life of the patent, and a license covering the use of any and all outfits previously installed by us. If you should receive any notice of alleged infringement of the Weston Cafeteria Patent, please communicate with us at once, sending all papers you may have on the subject as well as the date of installation, location, original ownership, and all other details possible. The facts will then be submitted to our Attorneys for further action" (5).

Under date of February 12, 1931, the Albert Pick-Barth Company, Inc., issued the following statement: "In order to put an end to costly litigation and as a measure of protection for our customers we have come to an agreement of settlement with the owners of the so-called 'Weston Cafeteria Patent.' We have secured license to manufacture cafeteria equipment during the remaining life of the patent and we are able, in all proper cases, to furnish licenses to our customers covering equipment purchased from us. This applies not only to the future life of the patent but also to claims for past infringement. If you consider yourself entitled to such a license, please forward to us at once information about location of the cafeteria . . . and the details of its purchase from us. We will then refer the matter to our counsel for future action. If you should receive any notice or demand claiming infringement of the 'Weston Patent,' please communicate with us immediately." This announcement

was signed by the Albert Pick-Barth Company and the John Van Range Company[1] (8).

A new name turned up in connection with this settlement. The Stearnes Company settled with Rollandet and Stratton but received its license from the Mapleton Corporation, a firm which had previously not been heard of (5) but whose president, J. H. Holcomb, is also president of the Britling Cafeteria Corporation. The Mapleton Corporation is reported to have acquired all the rights on the patent for the restaurant industry and to have established branch offices in several large cities.

Rollandet and Stratton themselves brought suit recently against the Waldman Cafeteria in Denver. This cafeteria had refused to settle with them for $300 and employed Clarence Ireland, attorney general for the state of Colorado, to fight its case if Rollandet and Stratton sued, as they did (9). Attempts were made by Rollandet and Stratton to settle out of court, the original demand of $300 being cut eventually to $75, but the Waldman Company refused to settle, feeling that with the backing of the Food Service Equipment Association the matter had best be settled for all time in the courts. Evidence of prior use of the cafeteria device has been piling up and the trade feels that in the Waldman case for the first time a complete and adequate defense will be presented. The case has not yet been tried so that the outcome is unknown.

In the meantime, under date of March 18, 1931, the Mapleton Corporation has been circularizing the cafeterias, making demands for a settlement with it for a license to operate under the Weston Patent (10). The Defense Committee of the Food Service Equipment Association advises ignoring such communications but suggests that they be reported both to the firm from whom equipment was purchased and to the committee. The committee has retained the services of Wilkinson, Huxley, Byron, and Knight of Chicago, one of the most prominent firms of patent attorneys in the country. The National Restaurant Association Defense Committee has employed Fred C. Rector of Wilson and Rector of Columbus as its counsel.

The defense organization of the National Restaurant Association guarantees to defend any member of the Association in good standing who contributes $75 for each cafeteria unit at least thirty days before a suit may be filed against such member. Cafeteria operators who are not members may be protected under the same plan if they subscribe to the defense fund (7). When the case is finally settled, a pro rata share of the defense fund will be returned to each contributing member.

[1] The John Van Range Company is a subsidiary of the Albert Pick-Barth Company.

Thus, in case of demands made against a cafeteria or any food unit using the cafeteria style of service for any or all of its meals, the operator should notify the firm from whom the equipment was purchased, and also the Food Service Equipment Association, 10 South La Salle Street, Chicago. If the operator is a member of the National Restaurant Association or wishes to contribute to the defense fund, notification should be sent to J. O. Mills, 17 North High Street, Columbus, Ohio, or to the headquarters of the Association, 6 North Michigan Avenue, Chicago, Illinois.[1]

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[1] On July 23, while the above paper was in press, the National Restaurant Assocation reached a settlement for its members with the Mapleton Corporation, owners of Weston Patent Letter No. 1,170,790.—EDITOR.

SOME THINGS TO KNOW BEFORE MARRIAGE

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DURING high school and for another year or so the logical approach to discussions of family relationships is that of the girl's position in the family as sister and daughter. Later, however, she looks to the future and thinks in terms of the family in which she may be wife and mother. She analyzes her own family more carefully, looks at young men in a different light, and gives some thought to certain economic and social trends which affect the family.

In the light of this attitude, courses in family relationships for college upper classmen have included lessons on family adjustments, home atmosphere, and thinking ahead to motherhood. The social aspects of the financial side of family life always prove interesting, such as the possibility of two wages, the use of these incomes, and the effect on the family of the mother being employed outside of the home.

Such a course should start with some consideration of the family as a social unit, its place as a laboratory of primary social contacts and reactions. Then might come one lesson on the basis of marriage, which might be called "things to know before marriage"—things young people should know about marriage in general and each other in particular.

As an introduction to this lesson, time must be given to show how the whole fabric of family life is colored by the relations between husband and wife. Study might be made of the varying emphasis placed, in different parts of the world, on family position, financial stability, sex knowledge, and romantic love as important requirements for marriage. America has no doubt laid more stress on romantic love than on any other requirement. It is worth discussing what the influence might be on our marriage problems if we gave more emphasis to these other considerations.

Of the things to know before marriage one of primary importance is the scientific facts of sex and its expression in marriage. This instruction had best be received in a complete course in sex hygiene given by a well-qualified and socially-minded physician; but it may well be within

the province of the course in family relationships to emphasize the importance of having such information and some of the dangers which await when sex information is not scientifically correct. Preceding generations have tried to draw a veil over the subject of sex or to go still further and to brand all pertaining to it as wholly sinful. In extreme reaction to this, the present generation has seemed to say, in songs, pictures, and literature, that sex is paramount in importance and that nothing else matters if a man and woman feel "sex appeal" for one another. Is it any wonder that the girls of today, trained at home in the old philosophy and constantly confronted elsewhere with expositions of the new, are often in a state of confusion? The course in family relationships can render the greatest service by bringing these girls to see that in the matter of sex, as in much else in life, the truth lies in neither extreme but in the middle ground, to feel that though sex reactions need not hold the foremost place in life, they are natural and may be healthful and satisfying.

Attention may be called to the eugenic motto, "do to the born and the unborn what you would have the born and the unborn do unto you." When girls realize that the "unborn" are their own children, they feel the force of this statement. In a book popular a few years ago, *Mary Cary* by Kate Lee Bosher, there is a little orphan girl, who, starved for family life, always talks about the time when she will find "the father of my children." College girls might find this a pretty good measure by which to test the men they know, probably better than whether or not they "give you a thrill."

Some of the most difficult adjustments in marriage arise out of dissimilar past experiences, whether these experiences are due to differences in race or religion or only in training and environment. These differences of experience may be as great as that between the background of a Chinese Buddist and of an American Methodist, or no greater than that between the point of view of a girl raised in luxury with no thought of watching expenditures and that of a man trained to the utmost economy. But none of these differences can be entirely disregarded when young people face the more or less complete amalgamation of their separate past experiences into one future. Time might well be given to showing the place courtship has in affording an opportunity for two persons really to know each other, to understand some of these differences, and in some way to estimate their importance.

Not only does family background play an important part, but some understanding must be reached as to individual ideals and ambitions.

Students will quickly see that some of the things it might be well to talk over before marriage are the type of home each desires, social or political ambitions, and the place each wishes children to hold in their future. For example, the girl who gave up the opportunity for an artistic career, believing she more deeply desired a home and children, faced a difficult situation when after marriage she found her husband had no desire to assume the responsibility of a family and that his idea of a home and marriage was largely a small apartment presided over by a charming hostess always ready for some sort of gayety. Likewise, the demands that certain professions and lines of work make on the home life cannot be lightly disregarded. The girl who longs to put her roots down deeply and to have always around her many loved possessions and close friends, might seriously question whether this desire can happily find its place in the life of an army officer or a mining engineer.

The economic side of family life deserves a large place in a course in family relationships. Many feel that disagreements over finances are the foremost of family difficulties. Assuming that the students have had a careful study of budgets and budget making, there is still much to be said from the purely sociological point of view. Before any system of budget making can be used successfully, certain considerations must be agreed upon. It might be one of the questions to talk over before marriage as to just what type of living will be commensurate with the joint desires and the available income. There is a wide variation between the expenditures required by a home that tries to live up to Oriental rugs and country clubs and that which runs to inexpensive chintzes, public recreations, and cash-and-carry stores. The problem as to whether there will be two wage earners and the various ways in which this will affect the family life, might be given a class hour by itself. Certain debatable questions are: the length of time this double wage earning shall continue; the use that shall be made of the second wage, whether entirely for running expenses or largely for savings; and the danger of establishing in the early years a standard of living which it might be difficult to maintain later if the wife should cease to add to the income after children were added to the family.

Such discussions should not neglect the point that people remain after marriage much what they are before. Some careful observers would place the matter of disposition or character as the most fundamental requirement for marriage. The man whose temper is never quite in control and who makes a most difficult employer is likely to make a difficult husband and an impatient and unsympathetic father. The woman

who is a nervous and irritable school teacher is likely to be a nervous and irritable mother. The course in family relationships should help young people to realize that successful marriage does not follow automatically on the wedding ceremony, but that it is something which must be fostered and developed by deliberate thought and attention.

INDIVIDUAL ASSIGNMENT IN HOME ECONOMICS TEACHING

The following descriptions of experiments with the Dalton, Morrison, and contract plans of teaching are assembled to illustrate how such means of securing "freedom with responsibility" may be adapted to the needs of home economics.

THE DALTON PLAN IN A FRESHMAN CLOTHING COURSE

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Modifications of the Dalton plan for use with home economics are arousing more and more interest, and its adaptation for a freshman clothing class at the University of Illinois High School may be sufficiently suggestive to warrant description.

The fundamental principles of the Dalton plan as interpreted by Lucy L. W. Wilson and her colleagues in "Educating for Responsibility" are:

> Individualized instruction, that each child may work to capacity, in spite of great individual differences; freedom, with stabilizing responsibility, so that each child may work at his own speed, in his own time; and a socialized environment.

The aims or objectives of the course were determined by an analysis of home activities pertaining to textiles and clothing and also by pupil interests. These activities were found to consist of the selection of household textiles and clothing from the standpoint of serviceability, beauty, and cost; their seasonal and daily care; and the construction of clothing. The abilities needed for performing these activities were listed and these formed the immediate objectives of the course, which included specific habits, knowledge, and general patterns of conduct. Members of an unselected class differ greatly both in their capacity to do work and in attitudes, ideals, and conduct; and consequently the number of abilities which may be engendered will differ with the individual. To meet this situation, three sets of immediate objectives and specifications for acceptable accomplishment were set up for each unit; one, designated C which it was hoped the average member might attain, a second, B, for those somewhat above the average, and a third, A, for those markedly superior.

Group C.

1. All work handed in must be done with reasonable neatness and accuracy; poorly spelled and illegible work will not be accepted for credit.
2. Good attention and steady employment during class hours are required of all pupils.
3. Pupils must rarely fail to have equipment ready when needed, such as pencils, pens, scissors, materials, note books, matches, etc.
4. In general, pupils must have clearly in mind what is to be done in laboratory work, plan the work systematically, and proceed with a reasonable amount of speed.
5. Pupils must be willing to cooperate with the members of the class and the instructor in the daily routine of the classroom and should be thoughtful of others.

Group B.

1, 2, 3, 4, and 5 as listed for group C.

6. Pupils must show some initiative in attacking new work and should be able to do the exercises without much aid from the teacher.
7. Recitations should be made well, without the aid of the teacher.

Group A.

1, 2, 3, 4, 5, 6, and 7 as listed for groups C and B.

8. Persistent daily preparation of assignments with but little urging and with but little help on the part of the teacher.
9. The pupils should develop noticeable "appreciations" and "interests."

The interests, needs, and capacities of the students determined largely the order in which the different phases of the work were introduced. It was also kept in mind that concentrated effort, if not carried to the point of exhaustion, is more effective than effort scattered over a long period and that repetition is necessary for mastery. Following these principles, the course was organized into units centering around construction of clothing, selection of textiles and clothing, and care of textiles and clothing. The unit on the selection of textiles was given near the beginning of the year; later in the course references were continually made to whatever knowledge was acquired or information gained in this unit that was helpful in solving other problems, thus securing the repetition needed for mastery.

The objectives of this unit were as follows:

Group C.

Ability to recognize the characteristics of textile fibers which affect the qualities of the material made from them.

Some appreciation of the production and of the processes in the manufacture of fabrics which affect their serviceability, beauty, and cost.

Ability to recognize the factors which affect the suitability, serviceability, attractiveness, and practical economy of fabrics.

Ability to recognize the fiber content of fabrics by the use of common tests.
Ability to recognize and name laces of the more commonly used types.
Ability to recognize and name the less expensive and more commonly used furs.
Some appreciation of the suitability, durability, and beauty of furs.
Ability to recognize and name the more commonly used domestic rugs.
Some appreciation of the suitability, durability, beauty, and cost of rugs.
A conviction that the study of textiles is necessary for intelligent buying.

Group B. (A further development of judgment, appreciations, interests, and attitudes than is possible in group C)
Appreciation of the responsibilities of being a textile consumer.
Appreciation of the varieties of textiles on the market.
Interest in the application of the principles of textile selection.
An attitude of inquiry as to the why of things pertaining to textiles and textile buying.

Group A. (A further development of judgment, appreciations, interests, attitudes, etc., than is possible in groups C and B)
A greater appreciation of the significance of branded textiles.
Appreciation of the development of the textile industry.
An appreciation of the fact that information concerning textiles may be obtained from current magazines, papers, etc.
A greater interest in the application of the principles of textile selection.

The time required for the completion of this unit was approximately four weeks with a double period daily. In this, as in other units, the order in which the learning exercises were given was not that in which the desired abilities were listed.

Learning exercises were formulated which would engender the abilities desired for the three levels of accomplishment, and in so doing the attempt was made to combine the various learning or pupil activities into a "balanced ration." Pupil activities included recitations, written answers to questions, oral reports of things observed, bringing materials from home, laboratory experiments, field trips, and the solving of problems both at home and in the classroom.

Each girl was given a copy of the learning exercises for all three levels or groups and asked to read them through for the sake of getting a general idea of what was to be taken up before she began them. It was explained that her acquisition of the various abilities would be checked by the teacher according to the exercises she had done and that the number of abilities thus acquired would determine the group in which she would be placed. It was also explained that to maintain a place in the A group she must pass a test covering the entire unit as well as complete satisfactorily all the exercises for the three levels or groups. Although recitations and other group exercises were to be held when the slower students

were prepared for them, and although a definite time limit was set for the completion of a unit, each student was told to work at her own rate of speed, the more rapid workers going on to the advanced learning exercises which could be done individually.

In checking the completed exercises, the instructor gave careful attention to the quality of the outcome, and if it was not desirable the student was required to repeat the exercise or do supplementary ones. If a student gave satisfactory proof that she already possessed the abilities for the engendering of which an exercise was set up, she was excused from and given credit for it. It was always kept in mind that the learning exercises were merely a means to an end, namely, the desired abilities.

AN ADAPTATION OF THE MORRISON PLAN TO HOME ECONOMICS

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When Dr. Morrison's plan of teaching is mentioned, it is frequently in reference to his "mastery formula" in "The Practice of Teaching in the Secondary School." The formula reads, "Pre-test, teach, test the result, adapt the procedure, teach and test again to the point of actual learning." Interpreted by the home economics teacher this may mean:

1. Make a brief survey of the homes of the girls and projects they desire.
2. Give the entire class an introductory test (Dr. Morrison's pre-test) designed not only to show what they know about the project but also to stimulate interest.
3. "Teach." Present necessary information for solving the problems which the project or unit of work involves. Dr. Morrison says: "A unit is a comprehensive and significant aspect of the environment or an organized science capable of being understood" and "a problem exists when a question is raised in the mind of the student in such a manner as to challenge its solution."
4. "Test the results" for all class members at the same time.
5. Review the test orally with the class and reteach some points. If the girls who received low grades in this test feel they have reached mastery, they may retake the same test immediately. Otherwise,
6. "Adapt the material." It is necessary frequently to have the class progress at a fairly even rate, making allowance for individual differences by special projects.
7. "Teach and test again to the point of actual learning." Most of the reteaching and retesting until mastery is reached is done after class, before school in the morning, and at noon.

A description of a pajama project, worked out in the high school at Marion, Kansas, will illustrate the adaptation of the plan to special conditions. This is one which the girls like very much and which is generally included among those chosen. The introductory test includes something about design of garments, materials, commercial patterns, pattern alterations, placing of pattern and cutting of garment, procedure in making garment, and construction work. These tests are carefully checked, but no numerical grade or points are given on the results. The problems are organized from these papers and from the already determined principles.

The problems are always stated in terms of the student and not in the terms of the teacher. The problems that the class used this year included: How shall I select a design and material for my pajamas? How shall I test and alter my pajama pattern? How shall I cut and mark the different pieces of my pajamas? What procedure shall I follow in making my pajamas? How shall I determine what kind of seam finish to use in making my pajamas? How shall I finish the neck, the top of trousers, and the bottom of waist and trousers of my pajamas? How shall the class criticize the pajamas made?

After the problems are decided upon, the guide sheets are made. These may be given to the students, put on the board, or discussed in class as best fits the case. The students here prefer the individual copies, and these seem generally to give the best results. The sheets contain the questions which must be answered by all and which when satisfactorily mastered give a C grade. The student who wishes and is capable of doing more work is given problems which add breadth and depth to C accomplishments and which are spoken of as on B level. If the student is capable of still more work, work may be given on what is known as A level. In some projects it is possible and desirable to let the girls help decide the type of the advanced study. The A and B work may include oral or written reports or home projects.

The statement of a problem on the guide sheet is shown below:

Problem. How Shall I Determine What Kind of Seam Finish to Use in Making My Pajamas?

References:

"A Girl's Problems in Home Economics," Trilling and Williams, pp. 90–93

"Clothing Construction," Brown and others, pp. 186–187

"Sewing Handbook for Club Girls," Kansas State Agricultural College, Extension Bulletin 42, pp. 11–12

What seams may I use in making my pajamas?

What factors aid in determining the selection of the seam I shall use?

How is this seam made?
Practice making the seam and have it checked by the instructor before starting the garment.

More questions than the above may be put in the guide sheet, the previous projects determining to a great extent the content of the questions.

In some problems it is often wise to use a different form of question. For example, completion questions may be used very satisfactorily and are generally answered more carefully than the essay type shown above.

The next question that comes up is whether the teacher shall check the guide sheets or not. In the writer's opinion, less reteach work has to be done when the answers which the girls write out are scored.

After the project is completed, the students are tested. For those who obviously have not mastered the material, it is reorganized, retaught, and then they are retested. The question as to when and where to reteach and retest is largely answered by the number who have failed to master various problems.

This plan encourages the pupil to choose, in a limited way, the grade she will make and to assume responsibility for her own progress; it also sets before her definitely a clear picture of what she is expected to achieve.

THE CONTRACT PLAN

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The contract plan as used in home economics may be defined as a plan for carrying out the differentiated, long-unit assignment. It is not a method, but a scheme into which may be incorporated any or all methods of teaching. Teaching is thus specified because a frequent but erroneous criticism of the contract plan is that little or no teaching is required. In using it, the teacher may present material to the whole class, to small groups, or to individuals, and any or all methods may be used at some time during a unit, depending on its length and scope. Thus, in the unit on the dinner as worked out in the high school at River Falls, Wisconsin, as an introduction, the whole class works together on the types of foods most frequently used for dinner. Each girl looks up a number of menus and from these forms her own conclusions as to what foods generally constitute a dinner. All these are discussed in class and general conclusions drawn about the foods usually served for dinner. From this point on, the work becomes mostly individual, each girl working at her own speed. Laboratory problems are introduced frequently to bring the pupils to-

gether and relate study material to practice. In the laboratory, individual and group teaching are carried on successfully. The project method may be used to a greater or lesser extent according to the needs and ability of the student.

A unit of work for a definite period of time is covered by the "contract" and includes all possible minimum essentials of the course plus additional work which is differentiated to care for the needs, interests, and capacities of the individual pupils. The work to be done in one part of the course is sometimes spoken of as a block. The "minimum essentials block" includes the work all students are expected to cover and allows for a variety of interests and ambitions; it is rated as 75 per cent of what it is possible to cover in the unit, while that in the "upper block" is rated progressively higher as its extent and difficulty increase.

A mimeographed copy of the contract is given to each pupil. In it are found study sheets containing a list of words vital to the work, questions to be answered (including those of content and opinion), suggestions for ways and means of doing the work, self-checking tests and answers, laboratory problems essential to the unit, lists of reference books, pamphlets and magazines, all text assignments, and other suggestions which will guide the pupil in her work. The first pages deal with the minimum essentials or 75 per cent block. The last page is devoted to the upper block and gives suggestions for work to be done by the students after they have finished the minimum essentials. The grades given for work in the upper block are 80 to 85 per cent, 85 to 90 per cent, and 90 to 95 per cent; and the suggestions for such work are usually accompanied by the range of points which may be earned by accomplishing it; for instance, one large poster, very well made, may receive five points (80 to 85), while two smaller, less striking posters would be necessary to receive the five points. It is in doing the work in the upper block that the child may develop any talent which does not find expression in other parts of the course. The work of the 90 to 95 per cent block is intended to be creative and original with the student, not something that the teacher has suggested. Home projects make very good upper block work.

How the contract works is an interesting point. In approaching the unit, the teacher presents the aims along with ways of achieving them. This gives a survey of the work to be done and the students have an idea of the goal to be achieved. Everyone in the class starts on the minimum essentials block at the same time, but very soon the more gifted individuals are surpassing the slower ones. Here the need for directed study enters, since a great deal of the creative work can be done only in that

way. The ideal situation would be for each child to work at her own speed until she has finished the block, but the danger is that some of the slower or less capable ones might never reach a finishing point. So in the contract plan, as in most other schemes for supervising work, a certain amount of urging is necessary. However, the advantage here is that the gifted child can go ahead by leaps and bounds. There is no reason whatever why such a child should have to wait for the slower ones, if her work is done satisfactorily.

The teacher may check the work on the 75 per cent block at frequent intervals throughout the course as well as when it is finished. This eliminates the necessity of last-minute checking which has been one of the points criticized in this plan. Frequent check-up tests, of the self-checking type, will keep the student as well as the teacher informed of the progress. Laboratory work in foods might seem to present a difficult problem in this connection, but by careful planning it is possible to keep the laboratory work up to date for the gifted child and still not push the slower child.

The beginning problems in clothing will probably be planned to help students acquire skill in construction. As soon as a student has finished one minor project, such as a slip, she may go on with plans for her next project, which may be pajamas, a major project. A variety of problems carried on at the same time in the classroom requires the repetition of information, but by explaining the process to a group of girls who are at approximately the same point in the project a large part of this repetition may be eliminated. In clothing work the contract gives girls the advantage of knowing from the beginning which projects are to be undertaken. They also know the amount of time alloted for all the projects, and may determine their own speed so long as the work is satisfactorily completed. In case all their work is completed in advance of the time set including the 95 per cent block, they may be excused from this class to go to another room for work in another subject.

A test is usually given at the end of the 75 per cent block to determine whether the work has been thoroughly mastered. The grade of 90 per cent may be taken as indicating mastery, in which case if the test is not passed with the required grade the first time, the student must go back and study the places in which weakness is shown and take the test again when she feels that she is ready. This necessitates two different tests covering the same material to eliminate the possibility of the answers being memorized without regard for their meaning. The teacher may avoid the necessity of preparing two tests by writing one long test and

giving alternate questions each time the test is taken. Of course, there is a limit, usually three, to the number of times this mastery test may be taken. Experience seems to justify the conclusion that less significance might well be attached to meeting the 90 per cent mastery test and that a 75 per cent grade on a test may be satisfactory if the student's work is checked during directed study and frequent check-up tests and practical laboratory tests are given.

Opportunity for spontaneous individual work is gained through the work in the upper block. The suggestion for activity here may come from the previous work, from the teacher, or, better yet, from the pupil. For instance, in doing her individual work on the preparation of a dinner which was part of the required block in the dinner unit, one girl found that she did not know much about the sizes, grades, and costs of canned goods and decided that for upper block work she would make a long study of canned goods. With a few suggestions as to possible source material, she worked out a splendid report which she presented to the class during a later regular laboratory period. It is wise for the teacher to talk over the upper block with a girl before she starts to work on it to be sure the goal is definite and attainable. This also makes it easier to give the needed guidance. In the upper block work it is possible to enlarge upon the minimum essentials, foster successfully any special talent which may have manifested itself in the previous work, encourage an avocation, do guidance work toward a vocation, and help each girl on problems which could not otherwise be touched in school work. It is usually possible for all but the very slow to do upper block work if they so desire. The teacher's task is to make the need apparent. The upper block work is really of benefit to all pupils because through it book reports, plays, exhibits of manufactured goods, style shows, posters, craft work, graphs, charts, booklets, poems, and demonstrations may be made available for the whole class.

In summarizing the results of the contract plan it may be said that it presents to the student a definitely organized scheme for work, with the aims or goal clearly set forth so that frequent and systematic reference may be made to it. The bright girl may work through the 75 per cent block within the minimum time and then be spurred on to increased effort on the upper blocks where her individuality may be more completely expressed. In this plan the teacher has time for the gifted child as well as the slow one, a situation which is not so easily achieved in other plans where the teacher frequently has not time to give the gifted child the help and encouragement to which she is entitled.

It is obvious that the plan cares for individual differences in needs, interests, skills, initiative, and capacities.

The following poem which Lois Peterson of River Falls wrote in connection with the 95 per cent block of the dinner unit, seems to tell, better than any description, what the contract plan may call out from a high school girl:

HOW THE TABLE FEELS

When hearts are light and spirits gay
You almost hear the table say,
"These people give me hearty cheer,
I'm very glad they're round me here."

If food is wholesome, linen white,
China and silver polished bright,
With pride the table spreads its leaves,
Glad to dispense what it receives.

With friends in loving converse near
The table speaks for all to hear.
It says as plain as a table can
"Draw round me all, I'm spread for man."

SIGNS OF THE TIMES

RADIO AND HOMEMAKING. Radio is an extension of the home. This invention has widened the walls of the home to include the entire world. The ears of both parents and children are given an opportunity to hear many things both good and bad that never before could have come over the threshold of our homes. Television is here. In a short time our people will be seeing via the air and to the power of vocal expression will be added the force of facial expression and action. No one knows just what all this means. For the individual it means infinite possibilities for disaster or for achievement. For the world it means a new organization which will sweep across present national lines and continental barriers. We cannot ignore the fact that people feel closer together than ever before. They are as familiar with world affairs today as they were with national affairs in 1900. It is out of these common backgrounds of interest and information that the political, industrial, and social orders grow.

Radio affects the home with peculiar power because of what it brings into the home at all hours. Psychologists teach that whatever goes into the human mind comes out. We may call our radio programs by any name we wish—advertising, entertainment, formal instruction—they are all education. They affect our attitudes, influence our speech, and help to determine our purposes and ideals. The individual parent becomes powerless and is forced to exercise whatever control may be necessary through common action, through legislative regulation, and an active, informe public sentiment.

Radio is, therefore, the immediate concern of every parent and citizen. American radio policy—contrary to the best experience of the rest of the civilized world—has been developed on an advertising basis. Our radio frequencies or channels have been monopolized by private interests largely ignoring the needs of localities, the rights of states, and the educational needs of the federal government. There has been an effort to force educational institutions and government departments to use the radio facilities of the monopoly groups or to stay off the air. In America censorship has been, in fact, the censorship of a selfish private monopoly.

Meanwhile, the use of radio for educational purposes has moved for-

ward very slowly. The money which educational institutions with radio stations should have spent for the development of their programs they have had to pay out for lawyers' fees and trips to Washington to maintain their rights on the air against the pressure of commercial concerns. Educational authorities have not been willing to place themselves at the mercy of the commercial stations. They are not willing to take the left-over hours which cannot be sold for advertising. They are not willing to spend time, talent, and money to develop radio teaching programs, knowing that these programs might be taken off the air at the whim of the manager of the commercial station or when some new advertising contract called for the time. The development of education by radio is much more difficult than the development of entertainment or commercial programs, because education must appeal to the deeper and more permanent interests; it must arouse activities in the life of the listener; it usually must be combined with a program of study through the use of printed materials. All of this makes heavy demands upon the teaching staff. It means eventually the development of special teachers and managers. The struggle for quality is the key to this great problem. Education on the air can never win and hold large audiences except as it meets the demand for programs of superior quality.

With thirty million people giving their full time to education, either as students or teachers, the schools have almost unlimited resources which can be mobilized to fill the air with materials that are both entertaining and instructive.

Suppose, for example, that our American radio system were so overhauled that it would be possible to give the best hours to a discussion of problems which are vital and immediate in the enrichment of home and family life. The resources of our schools of homemaking, of our extension workers, and of various organizations which seek to improve home life—all these by means of radio could be made the servant of a nobler culture for America.

Our people face two tasks of such vast significance that the destiny of the race itself is involved. First, the task of adjusting our habits of exercise, eating, and rest to meet the needs of a machine civilization which tends to keep people indoors at sedentary tasks, quite ignoring the needs of the organism for physical activity, fresh air, and sun. Second, the problem of so planning cities and houses that children will have an opportunity to develop through free play in the open the vigor and vitality which will carry them through life. This is primarily a problem of planning. It would be possible at half the price which people are now paying

for homes of inferior quality to provide homes of excellent quality surrounded by beauty, playfields, gardens, commons, and other facilities which would encourage rather than penalize the happy home life. Our civilization has got the cart before the horse. We have gone mad over "business" until we have forgotten that the main business of life is not making things or doing things but just living and being—the cultivation of a life that is happy, fruitful, and beautiful.

A new appreciation of home and family life would help America to lift herself from her present condition of doubt and inactivity. By emphasizing these fundamental values we shall point the way to a new advance. We shall mobilize for worthier purposes resources that have been idle or misused. We shall develop a mode of life which will bring to our entire population a standard of living hitherto enjoyed by the few. We shall come to think of "standard of living" in terms of education, personal cultivation, and broad intellectual and spiritual interests. Shall we use radio for these ends or shall we continue to disgust the radio audience with the trivial, the trashy, and the commercial?—JOY ELMER MORGAN, *Chairman of the National Committee on Education by Radio*[1] *and editor of the Journal of the National Education Association, Washington, D. C.*

RADIO AND HOME ECONOMICS EXTENSION. Radio is another of the industries suffering from what some of the Washington wags lately have been calling overprediction.

This is particularly true of radio in its relation to extension work in home economics and agriculture. Think back a decade and you will recall with me some of the soaring flights into fantasy indulged in by the enthusiasts of those early days of the cat-whisker crystal set and the sealing-wax-and-haywire broadcasting station. I have even heard it seriously conjectured that radio stations at the state agricultural colleges would make it unnecessary to have any field workers in extension, save the county agricultural and home demonstration agents.

In despite of this and similar predictions we have seen a marked increase in the number of traveling subject-matter specialists in agriculture and home economics. Radio is not replacing field work in home economics education.

But that is not to say that radio has not contributed measurably to extension of home economics information. Radio has. But we have

[1] For a description of this committee and its work, see page 861.

expected too much of radio for too little work on our part, as educators. Before using it to full effectiveness we need to cast a common-sense eye upon its possibilities and limitations, to define the job it can do in home economics extension, and to bend our energies to doing that job.

At first we were entranced by the mystery of radiotelephone communication. Because the voice of the speaker was mysteriously witched across a thousand miles of land and sea to the ear of the listener, we thought that this new agency might hold as yet unrevealed possibilities in educational work of our type and of all other types. We visualized the classroom transported to the home fireside, and all of America being effortlessly educated.

This entrancing mystery of science's new child benumbed our common sense for a time. We set up stations or entered into agreements with commercial stations and gave courses in agriculture and home economics. We granted certificates to those who completed the courses. But the number of courses offered by radio has steadily diminished. Those that remain on the air curriculum are confined to rigidly limited objectives, and the listener is obliged to go through the painful process of buying textbooks and boning at assignments if he is to consider himself advanced in knowledge.

The reason for the decline in "courses" is plain in the light of sober second guess. True enough we can transport, by radio, the lecture room to the household. But we cannot transport the laboratory and the library. We cannot dispel by radio hocus-pocus (or any other hocus-pocus) the everlasting truth that a person learns—he is not taught. The learner is not a mere listener. He is a thinker and a doer as well.

The radio lecturer inspires the interest of the listener. He moves the listener to take action and to learn. But, after all, the learning comes mainly from the action. That is especially true in the field of agricultural and home economics extension. We cannot stop with giving facts to people. We must see to it that the fact-receiver becomes a fact-user in his daily life if we are to feel that we have done a good teaching job. So we have got to put our listener-student in touch with books and bulletins, with persons who know and can answer his question, with demonstrations and exhibits, in order to give him detailed information that he really can put to work.

For radio talks lack permanence. You cannot pull them out of the loud speaker and file them away for reference when your memory gets rusty. Radio lacks pictorial effect. Pictorial effect is an essential to teaching the sort of things we mainly teach in agricultural and home

economics extension. Radio lacks opportunity for the interchange of ideas between the learner and the teacher, one of the oldest and one of the best methods of teaching and learning.

There are radio's lacks. In compensation, radio has one supreme advantage. It reaches multitudes of people quickly and easily, and reaches them in a setting friendly to learning—in the home itself.

So it seems to me that the wise way to use radio in home economics extension teaching is to employ to the utmost its power to rouse the interest of a great number of people, and then to put those interested people in touch with the persons and places where they can get detailed instruction in the homemaking practices we wish to recommend to them.

That means tying radio right in with the extension program in each state and each locality. It means forgetting that we ever thought radio might painlessly educate a nation, and buckling down to the difficult but inspiring task really of making learners of listeners—of people who without radio might never feel the urge to learn about the things set before them by the radio speaker.

In other words, I think that we have got to be prepared to follow up intensively our radio programs. That, I believe, is the first thing to look to in organizing an educational radio program. Be prepared with bulletins, with references to the field workers, with meetings and demonstrations, to make fruitful the interest inspired by radio.

But, granting that we are organized to follow up the radio program and to make it thoroughly effective in teaching, we are faced with the problem of how to make the program interesting, of how to inspire the listener to desire to become a learner.

A few conclusions on the method of approach to the listener and on the technic of writing the radio talk have come from our experience with radio in the Department of Agriculture. I give them to you simply as our observations, not as the final word on radio broadcasting technic.

To begin with, I find it helpful in writing or editing a radio talk to use the old device of imagining myself the listener. First of all, what is my situation as a listener? Well, if I am a housewife, I probably am busy about my household tasks, or have dropped them for a few moments to listen to the radio talk. I am in no mood to follow a closely-reasoned explanation of scientific principles upon which a recommended practice is founded. I don't want a lecture, I just want a chat in my everyday language. If the speaker starts off with a reference to the common, homely things that are part of my daily experience, my attention is captured. And if she continues by telling the story of how someone else

dealt with the common problems of housewifery, I decide that the household chores can wait a few minutes. The instant, however, that the speaker becomes professorial I recollect a dozen things that have to be done before the children come home for luncheon or the men come in from the field.

So the first injunction laid upon the radio speaker is to be entertaining and natural and friendly. Precisely the qualities that make a good guest about the house. After all, the radio speaker is a guest in the home of the listener, and he incurs the obligations of any guest, with the difference that the radio listener can be much more curt in dismissing an unfriendly or tiresome radio speaker than she can be in edging a boresome guest out.

A few simple rules on the grammar of the radio talk keep us on the right track. These rules violate most of the canons of scientific writing that have come down through the generations of scientific scholarship. Scientifically trained home economists will perhaps find it a jolt to obey some of the rules, but I think they will find a gain in their radio "it" by practicing these little tricks of language.

I have pointed to the story-telling method as one of the surest-fire ways of capturing and holding the attention of the listener. This means sticking pretty closely to the active voice, which goes against the scientific grain, I know. In order to avoid the perpendicular pronoun with its appearance of braggadocio and subjective judgment, the scientist has schooled himself to write in the passive voice. He says, "this was done," instead of "I did this." But then, if he is to become a good radio speaker, he must forswear the passive voice. Thereby he starts on the road to becoming a story teller, for the passive-voice writer walks backward through his story, while the active-voice writer saunters easily along.

Another wrench comes when the scientist radio speaker discovers that he must eschew the subjunctive mode and the third person as he gives the directions for applying a practice in which he has interested the listener by his story telling. Instead of telling the listener that "thus and so should be done," he says simply, "do thus and so." He uses the second person and the imperative mode.

These simple devices, you will find, I believe, add much to the effectiveness of your radio writing. Even though you are not trained in the nice turning of phrases, in the tricks of the writing trade, by practicing simple, straightforward statement you can become an acceptable radio friend to thousands of homemakers.

To sum up, then, the first essential to organizing a radio program of extension education is making certain that the means are at hand of

following up the interest roused by the program and translating that interest into action. In the actual presentation of the program, successful speakers first of all adopt an approach suited to the environment of the listener. Then they keep the attention of the listener by illustration and story-form presentation; they sprinkle "you's" liberally through their talks, and they give such simple directions as can be surely remembered by the listener in crisp, straightforward statement. Finally, as to grammar, the voice of the radio talk is usually the active voice, the mode is the indicative or imperative, the person is the second.—MORSE SALISBURY, *Chief, Radio Service, United States Department of Agriculture, Washington, D. C.*

RADIO IN EDUCATION. Those attending the first annual assembly of the National Advisory Council on Radio in Education[1] in New York City, May 21 to 23, found it an intellectually stimulating experience. Especially keen interest was manifest and divergent opinion expressed in the discussion concerning the potential values of radio in education; the importance and necessity of developing acceptable educational programs and the difficulties involved in preparing them; methods of determining the effectiveness of programs; the relationship of educators and educational systems to educational programs; the use of commercial and non-commercial radio channels in broadcasting educational programs; whether a program is justified because it draws a large audience and also whether one is justified if it serves only a special group; the present conception of the application of physical laws in the field of radio; and the various points of view as to the most desirable steps to be followed in the development of broadcasting in this country. The serious consideration given to these problems and the earnestness with which they are being studied by various groups gives promise of solutions based on fairness and justice to all concerned. From the apparent attitude of a number of the leaders present, it seems important that disinterested, social-minded leaders participate in the development of the plans for future action.

The program included the names of many outstanding individuals who, from various angles, have given serious consideration to the problems and possibilities which have come with the development of radio broadcasting. And because most individuals are only beginning to identify leaders in this field, it is perhaps worth while to call their atten-

[1] See also page 862.

tion to some of the leading speakers, such as Dr. James T. Shotwell, who discussed the possibilities of radio as viewed by the historian; General C. McK. Saltzman, chairman of the Federal Radio Commission; Dr. Henry A. Bellows, a former member of the Commission, and now vice-president of the Columbia Broadcasting System; Dr. W. C. Bagley, dean of the advisory faculty of the School of the Air of the Columbia Broadcasting System; Dr. R. H. Jones, superintendent of schools in Cleveland, under whose leadership broadcasting to the local school system is being developed; Benjamin H. Darrow, director of the Ohio School of the Air, which broadcasts programs said to reach 360,000 public school pupils in Ohio and adjacent states; Mr. Joy Elmer Morgan, chairman of the National Committee on Education by Radio, which is seeking the enactment of legislation allocating fifteen per cent of the available radio channels for the use of educational and governmental agencies; Miss Belle Sherwin, president of the National League of Women Voters, which has since January, 1928, sponsored the weekly broadcast of the Voters Educational Service; Dr. Ray Lyman Wilbur, secretary of the Interior; Sir John C. W. Reith of the British Broadcasting Corporation; Dr. R. A. Millikin of the California Institute of Technology, president of the National Advisory Council on Radio in Education; and Dr. Levering Tyson, the director of the Council.

Reports were presented from committees which have been studying conditions with reference to programs and the use of radio in education in various subjects such as chemistry, economics, history, parental guidance, and science. These reports should be given thoughtful consideration by educators who are seeking to inform themselves concerning the developments in the broadcasting of educational material in the different subject matter fields. A special committee on home economics in radio has not been chosen as yet, but it is anticipated that one will be appointed in the near future. In this connection, home economists will be interested to learn that the American Home Economics Association has recently become an associate member of the National Advisory Council on Radio in Education.—ALICE L. EDWARDS, *American Home Economics Association, Washington, D. C.*

ILLUSTRATIVE MATERIAL FOR THE TEACHING OF FOODS AND NUTRITION. The value of illustrative material for food and nutrition teaching is not easily appraised. Some of the best unquestionably helps to make truths more vivid and to accent important

points; some is worthless—not only ineffective—but serves to create an erroneous impression or even to breed contempt. Not only is the probable effect on the class one which needs consideration but also the means of determining the authenticity of the material. Can information in semi-scientific articles in the women's magazines be relied upon or must some allowance be made for concealed advertising? Must one rely on one's knowledge of the training and ethics of the author or director of the section? Can pamphlets reviewing literature regarding the value of certain foods in the diet be used as adequate sources of information when they are frankly advertising matter? Does the author review only such articles as serve for advertising the particular food or does he present the material in an honest nonpartisan fashion, and leave the conclusion to the reader's judgment? One difficulty with many of these advertising pamphlets is failure to date the publication. Material which might have been excellent in 1920 may be obsolete in 1931 and yet unfortunately it is available and used in many classrooms. When advertising matter is valuable, it would seem desirable that the authors attach not only the date, but their names and training to the material given the public.

It is neither possible nor feasible to evaluate all the material available for food and nutrition teaching. The host of posters, pamphlets, charts, material from magazines, food exhibits and models constitute far too great a task for even a cursory rating. If all were listed, such a collection would serve for little more than to discourage a teacher before she got her material either collected or filed. To list the best for any specific purpose would be an impossibility. What appeals to the high school freshman leaves the senior cold. Scientific and reliable material which seems interesting to one is deemed dry and involved by another. Whether one set of charts on meat is preferable to another will depend on the points being emphasized by the teacher.

It seems wisest, therefore, to formulate a basis for judging the desirability of illustrative material. (1) Is it scientifically correct and will it lead to a correct judgment? "Have you had your iron today?" failed to meet this criterion, suggesting as it did that raisins were the only important source and that a small box contained a day's requirement.

(2) What is the probable effect of the fact presented upon the recipient? The excellent poster "Milk Made the Difference" in which a little dog is contrasted with a large dog often fails in its purpose if used with adolescent girls. The teacher believes she is accenting the value of milk, but high school girls prefer to be slender and small-boned. If milk makes brawn, deliver them from its effect!

(3) Is the effect on the emotions desirable? An enthusiast for the breast feeding of infants portrays tombstones of different sizes, indicating the low mortality of breast fed infants and the larger mortality of the artificially fed. Such a comparison though statistically correct, may instill fear in the minds of some mothers who should resort to artificial feeding and may do their infants harm because they struggle too long with an inadequate milk supply. Though this is an extreme instance, much of the advertising material aims to develop fear of consequences if the advice is not followed. Engendering fear, whether of constipation or of the social stigma of halitosis, has no place in the classroom. If we are unable to teach by other means than instilling fear or ill health in the minds of students, let us study mental hygiene.

(4) Does the material serve to stimulate thought or merely confuse with unrelated facts not pertinent to the problem? Since good teaching aims at leading students to organize their own material and draw their own conclusions, the information offered in the illustrative material should serve as a tool to be used in evaluating foods and constructing true judgments. In other words, illustrative material should be like properly chosen playthings for children: material for construction, not mechanical toys which amuse for a moment but fail to develop the child because they leave him nothing to do. Many posters are like mechanical toys—complete and totally ineffective as teaching material. Compare, for example, the poster "Milk Is Your Best Food, Drink More of It" with a chart furnishing data to compare milk with other foods. In this chart one finds that a pint of milk contributes eighty-eight per cent of the calcium, fifteen per cent of the energy for a day, and but eight per cent of the iron. From this one comes to realize that milk is not complete in itself but needs supplementing with foods containing iron. The construction of models or charts of the relative contributions of different foods to the diet offers effective material for developing the power of judgment. If classes are taught food values by means of "shares,"[1] the colored sticks offer effective material for constructing judgments. To see the problem and try to solve it leads to ability to see the food in relation to the diet as a whole.

(5) Is the emphasis well placed? Does a poster attract because of its artistic perfection or because it portrays a vital truth? Many of the vitamin charts show an attractive array of foods well placed for a still-life picture, but accenting nothing, milk, eggs, butter, cod-liver oil, and

[1] See "Visualizing Food Values" by Mary Swartz Rose et al., JOURNAL OF HOME ECONOMICS, Vol. 20 (1928) pp. 781–787.

oranges all appearing as equally good sources of every sort of vitamin. Such posters make one feel that the diet could scarcely fail to be adequate in every vitamin. Do food models attract attention because of their beauty or because they make comparisons on the basis of nutritive value easy? The same question should be asked regarding pasteboard food models mounted on cards and fitted into standards. Though both of these are often useful, it should be remembered that actual foods make a far deeper impression. The expense and fragility of models often preclude their use. Though they have value for more or less permanent exhibits, one must remember that illustrative material of any kind ceases to interest after a short time and may, if in evidence too long, actually breed contempt.

(6) What is the value of completed diagrams or charts compared with a piece of chalk in a teacher's hand stressing the important features? Does not a student watching the diagram develop, seeing the important elements slowly relate themselves, learn more than from seeing a perfect illustration even if guided as to what to look for? A simple diagram of the alimentary tract done slowly while students are thinking about each part as it appears, is of more teaching value than the most beautiful colored illustration held up for inspection, because one does not then know what the observers will really see. In marketing, instead of diagrams of the sizes of different units of canned foods, a collection of the various containers on the market made by the student himself, may become a prized possession to be explained with pride and zeal. In studying the different grades of eggs it is more educational to have a class choose eggs of different grades, blow them, and arrange an exhibit.

(7) Are large diagrams, charts, and pictures shown in class of as much value as smaller cuts which can be attached to recipe or other cards and filed with them? For example, a small picture of a correctly laid table, a perfect piece of cake, an attractive salad, or of an efficient step in some procedure serves to develop standards quite as well as a single large wall chart. Such a collection made from magazines and advertisements has the advantage of encouraging students to form the habit of finding their own illustrative material. Furthermore, this type of material simplifies filing and is always accessible when a wall chart is apt to be laid away and forgotten.

The value of poor illustrative material should not be overlooked, for it offers a unique means of judging the adequacy of one's teaching. If good, poor, and indifferent material is given students for evaluation and they are able to separate the false from the true, they have developed critical

judgment. If advertising material can be used to teach them to judge and evaluate, accept and reject, it serves a good purpose. Our primary purpose is to teach them to think for themselves, to question half truths and didactic statements. Illustrative material has no place in high school or college classrooms as propaganda. Unless it serves to illustrate essential truths, to initate thought, develop correct judgments, it has no worth.—JENNIE I. ROWNTREE, *Associate Professor, Department of Home Economics, University of Washington, Seattle.*

THE PUBLIC SCHOOL AND PARENTAL EDUCATION. The Bureau of Child Research of the University of Kansas recently sent a questionnaire to each listed married woman graduate of the University to ascertain how much help these women consider they received from University life, academic or otherwise, with reference to their domestic careers; and also to obtain the opinion of these women as to the present problems of the American home and especially their suggestions as to what they think the University should do to serve further the American home. In another section of the questionnaire the opinion of these women was also asked as to the duty of the public school in the preparation of the child for home life—in other words, what should precede university education.

The women answered overwhelmingly in favor of pre-parental training in colleges and universities, but it will be seen from the following summary of their replies to the questions about public schools that they think this training should not be delayed or proffered only to the favored few who go to college.

To the question "Should homemaking be taught to girls in the public schools?" 326 answered, 92.6 per cent of whom think the public school should prepare the girl for homemaking. To a similar question as to boys, 309 replied, of whom 83.2 per cent favored such teaching for boys.

While a slight conservatism was evident in the replies from the older graduates, this was not so pronounced on the other subjects as on the teaching of reproduction. Among the group graduated in the years 1919 to 1928 inclusive, 95.5 per cent favor such teaching for girls and 84.5 per cent, for boys. Among the middle group, graduated in the years 1909 to 1918 inclusive, 88.6 per cent favor such teaching for girls and 80.2 per cent, for boys. Among the older group, graduated between 1875 and 1908, 89.8 per cent would have girls taught homemaking and 83.6 per cent would include boys.

In all three groups a few were uncertain or gave qualified answers. These constituted 2.8 per cent of the replies with reference to girls and 8.4 per cent to boys.

A small but important number do not favor teaching homemaking in the public school, 4.6 per cent of those answering with respect to girls and 26 or 8.4 per cent to boys. As might be expected, the conservatism on this point is more pronounced with the older groups.

The question "How should homemaking be taught in the public school?" is an ambiguous one which might be expected to elicit vague answers. Many merely listed the useful items which should be taught rather than where and how these should be offered. Of the 259 answering this question, 149 or 57.5 per cent named some aspect of home economics. Doubtless some of the others had home economics courses in mind, although they did not so name them. This term was more commonly used by the older groups, 64 per cent of the middle group and 57.7 per cent of the older group using it, as contrasted with 54.5 per cent of the recent group.

The young group obviously had a broader concept of homemaking, 34.2 per cent of them naming a variety of items of training such as psychology, child care, applied sociology, child welfare, fundamentals of home relations, the home in history, training in citizenship. Of the middle group, 29.7 per cent gave similar answers, and of the older group, 23 per cent.

The idea of using the child's own home as a laboratory was mentioned 18 times, 10 times by the younger and 4 times by each of the other two groups, or by approximately 7 per cent of each group. Doubtless it was the intent to have this directed by teachers of home economics.

Six in each of the younger and older groups frankly stated that they did not know how the subject should be taught.

The last group of questions related to the teaching of the health, care, and management of children, "Do you think instruction in health, care, and management of children should be given in the public school to boys? To girls?" and "How should these subjects be taught?" Two hundred eighty, or 89 per cent, of those answering think these subjects should be taught to girls; 219, or 73.7 per cent, of those answering think boys should also receive such instruction.

Fourteen, or 4.4 per cent, are uncertain or gave qualified answers to the question about girls; and 33, or 11.1 per cent, of the answers relating to the teaching of boys were so classified. The older graduates were more inclined to be vague than were those of the younger group.

Twenty-two, or 6.6 per cent, of the entire group did not favor teaching these subjects to girls; and 45, or 15.2 per cent of those answering, did not favor teaching them to boys.

When it came to the consideration of where and how these subjects should be presented there were fewer answers and a still wider range of suggestions. The answers were tabulated under four general headings: I. Integration of these subjects with other courses. II. Offered as special courses. III. Taught by observation and practice with children. IV. Miscellaneous.

Of the 226 answering this question, 76, or 33.6 per cent, think the subjects should be integrated with such regular courses as those in physiology, hygiene, home economics, physical education, home nursing, child psychology.

Sixty-six, or 29.2 per cent, think these subjects should be taught through practice and observation with young children—in nursery schools, day nurseries, clinics, their own or other homes, or in the classroom. Three mention doll play as having project value in this connection. Forty-seven, or 20.8 per cent, think special courses, required or elective, in subjects such as child care, mothercraft, training for parenthood, would furnish the proper medium of instruction. There were also a number of answers (particularly 18, or 44 per cent of the total from the older group) grouped as miscellaneous, which conveyed such ideas as: teaching care for children by caring for themselves; putting units on the subject in circulating libraries; discussions in home-rooms; teaching in Scout and Campfire work.

On the whole, the graduates of the youngest group favored specific instruction and those in the oldest group were most general in the character of their suggestions.—FLORENCE BROWN SHERBON, *Department of Home Economics, University of Kansas, Lawrence.*

EDITORIAL

RADIO AND EDUCATION. Some of the ways in which radio does and may effect education in general and home economics in particular are brought out in the papers on pages 847 to 854. Those by Mr. Joy Elmer Morgan and Miss Edwards also show that several well organized efforts are being made to safeguard the interests of the public in relation to the educational possibilities of this amazing new means of conveying information. A brief description of how they came into being may clarify the situation.

In May, 1929, Secretary Wilbur appointed an Advisory Committee on Education by Radio to consider the educational aspects of the radio situation. Commissioner of Education Cooper was chairman of this committee (often spoken of as the Wilbur Committee) and its work was aided by gifts from the Payne Fund. As a result of its deliberations, a conference was called, and last autumn the committee presented a report whose recommendations, as printed in *Science* for October 31, 1930, include: The establishment in the Office of Education of a section devoted to education by radio, to be supported by funds provided in the regular budget of the United States Department of the Interior; the setting up of an advisory committee of from nine to fifteen representatives of educational institutions, commercial broadcasters, and the general public; and the securing of funds from interested persons or foundations to be used in studying and experimenting with educational programs under the direction of a non-partisan committee of educators and laymen. It was also requested that the Secretary "bring to the attention of the Federal Radio Commission the importance of the educational interests in broadcasting, and that he keep the President of the United States informed of the desirability of having on this commission spokesmen for programs which will tend to improve the general well-being of the American people."

The National Committee on Education by Radio, of which its chairman, Mr. Joy Elmer Morgan, speaks on pages 847 to 849, is the advisory committee recommended in the report of the Wilbur Committee. It thus describes itself in the first *Bulletin*, which was published February 12, 1931.

The National Committee on Education by Radio was organized on December 30, 1930, as the result of a series of events and conferences which took place during 1930 and which indicated the clear need for a more active interest in radio on the part of educational workers. The purpose of the Committee is to secure to the people of the United States the use of radio for educational purposes by protecting the rights of educational broadcasting, by promoting and coordinating experiments in the use of radio in school and adult education, by maintaining a Service Bureau to assist educational stations in securing licenses and in other technical procedures, by exchange of information through a weekly bulletin, by encouragement of research in education by radio, and by serving as a clearing-house for research.

. . . . . .

The activities of the Committee are financed by a five-year grant from the Payne Fund. The members serve without pay. The Committee will maintain a general office at 1201 16th Street, N. W., and a Service Bureau in Room 997, National Press Building, Washington, D. C. This is the first number of a weekly bulletin which will seek to spread information relating to education by radio.

As regards the recommendation regarding education by radio in the United States Office of Education, at least a beginning has been made. From April, 1930, to June, 1931, Mr. Armstrong Perry served as specialist in radio education in the Office, his salary being paid by the Payne Fund. It is expected that a senior specialist in education by radio will be appointed in the near future through the Civil Service and paid by Department funds. Meanwhile, Mr. Perry has maintained some connection with the Office, though most of his time now goes to directing the Service Bureau of the National Committee on Education by Radio. He is the author of the pamphlet "Radio in Education" published by the Payne Fund in 1929.

The National Advisory Council on Radio in Education owes its formation to a group from the American Association for Adult Education. It recognized "the existence of radio as an unharnessed force in education" but

The Association, aware of the unsettled conditions in the broadcasting field, was reluctant to investigate the possible uses of radio in education until a considerable group within the industry had indicated a willingness to cooperate and an interest in the further development of educational programs. Such interest having been manifested, the Association, on funds provided by the Carnegie Corporation of New York, authorized a six-months' study.

Mr. Levering Tyson, associate director of university extension at Columbia University, directed the work. This began in September, 1929, and was done in cooperation with that of the Wilbur Committee. Mr. Tyson's report was published in the spring of 1930 by the American

Association for Adult Education under the title *Education Tunes In* and presents a vivid picture on the general situation, invaluable to laymen who wish a clear statement as to government control of broadcasting in this and other countries, methods of financing, possibilities of bringing order out of the present chaos in this country, the general character of programs, the relation of educators and laymen to the whole problem. Meanwhile, several conferences of educators, commercial interests, and laymen were held, and in 1930 the present National Advisory Council on Radio in Education was organized "to consider what the opportunities are for radio in education." Funds for basic organization and maintenance for a minimum period of three years have been assured by John D. Rockefeller Jr. and the Carnegie Corporation of New York. The president is Robert A. Milliken and the director, Levering Tyson; headquarters are at 60 East Forty-second Street, New York City. It publishes bulletins known as "Information Series," the first of which thus describes its functions:

> In order to develop its work, the Council has undertaken to make its office a clearing-house of information about educational broadcasting as facts become available for close study and analysis. Committees, functional in character and representing subjects which admit of presentation by radio, will undertake to have programs of high quality in such subjects devised by qualified people. Members of these committees are being enlisted from all parts of the country. The Committees will be small enough to permit concrete action and large enough to be thoroughly representative of the best thought in a particular field. Eventually, in certain geographical areas, local Councils will be formed to represent the national organization and to accomplish in those localities whatever the National Council attempts throughout the country. At least one qualified person in each State, on appointment from the Council, will be assigned to analyze and interpret broadcasting as a whole as conducted in that State and will report to the Council at regular intervals on broadcasting conditions which affect the development of education by radio.

The list of proposed functional committees includes over twenty subjects, but not all are yet organized; as Miss Edwards has pointed out, the one on home economics is among those awaiting formation. Local councils are already at work in a score or more cities. These are usually initiated by a group of representative educators, who, after they have organized a council, invite to membership representatives of broadcasters and broadcasting stations in the locality.

Among the important committees of the Council is one on research, of which the chairman is Dr. W. W. Charters of Ohio State University and which has drawn up an outline of research problems in radio education. These include the objectives of radio education, administration of the

station, curriculum materials, methods of presentation to be used by broadcasters and by teachers, the pupil and his learning, measuring results, and the psychology of radio education.

The annual assemblies, of which Miss Edwards reports the first, are another way by which the Council plans to promote its purposes.

The National Committee, the Advisory Council, and the Office of Education are working in close cooperation with one another and with other educational agencies which are actively considering problems of radio and education. Such cooperation is, of course, essential to avoid overlapping and confusion, though in a subject so new and so rapidly changing, the danger of too many trying to do the same thing from slightly different points of view is certainly less than allowing any aspects of it to be neglected.

RADIO EDUCATION AND HOME ECONOMICS. Radio is already raising vital problems for home economists in many state colleges, in an increasing number of public school systems, and in the business world. Practical suggestions for those who broadcast are given on pages 849 to 853 by Mr. Salisbury, whose talk on the same subject aroused great interest at a round table of the home economics section of the Association of Land-Grant Colleges last autumn. Most of us are still fumbling to know what to say and how to say it, when the opportunity comes. The popularity of homemaking topics "on the air" seems likely to be as great as on the woman's page in the newspapers. Unfortunately, much that the professional home economist dislikes to consider as home economics is classified as such by commercial broadcasters, as it has been by editors.

In the light of all this, the executive committee of the American Home Economics Association decided at Detroit that the time had come for the Association to prepare for definite work. The editor of the JOURNAL and the executive secretary were instructed to study the situation for the benefit of a committee to be appointed soon.

STOCK-TAKING BY THE HOME ECONOMICS TEACHER. This is a strategic month for the classroom teacher to take stock. The pressure of incessant demands climaxed by the June flury has now given place to clearer vision and new ambitions born of rest, variety, and summer study. Moreover, the fact that new classroom procedures are most

easily introduced at the beginning of the school year, gives a special value to the fall "inventory."

It is perhaps especially hard for the home economist to keep her teaching up to date. Like all educators, she feels the pressure of changing educational policies which is being intensified now by the critical survey to which the public is subjecting the schools, the rapid progress in the sciences which throw light on the laws of learning, and a more enlightened appreciation of child development. In addition, she must adapt her subject matter to the rapidly changing social, economic, and ethical problems that arise in present-day homes, remembering that the ideals of home which her pupils now form and their ability to make sound choices for attaining them will not only modify their own present development, but will largely mold the homes which they themselves will establish later. Having considered all this, she comes to the concrete task of selecting the skills and appreciations which seem at present most likely to produce in her especial group of pupils the desired results and of setting up goals attainable by them.

In other words, the home economics teacher must not only sense correctly her share in the organization of which her work is a part, make practical application of educational philosophies, and select the phases of home economics which she will stress, but she must also decide how to offer the selected subject matter so that each child may develop his power to think and his ability to act. Nor may she ever lose sight of the fact that for success in this undertaking it is essential to enlist the help of the most vitally interested party, the child himself.

No small order—but the more stimulating because of its difficulty and its genuine social value.

PUPIL FREEDOM WITH RESPONSIBILITY. Three rather generally accepted plans for teaching allow opportunity for the child to budget his own time and to progress at his own rate towards goals partially set by his own judgment and ability. Experiments in adapting these plans to home economics are described on pages 837 to 846 by teachers who have felt that the merit of such procedures in other fields had been sufficiently proved to warrant pioneering here.

The fundamental principles of the Dalton laboratory plan as evolved about twelve years ago by the combined effort of Miss Helen Parkhurst and the staff of the high school in Dalton, Massachusetts, are summarized with exceptional skill and clearness by L. W. Wilson in *Progres-*

sive Education for July, August, and September, 1925. As Miss Wilson shows, the plan is in opposition to only one common school practice, namely, the formal recitation. It readily incorporates schemes for supervised study, socialized recitations, classification according to ability, and the use of problems or projects. Among tangible results from extended use of the plan in the South Philadelphia High School for Girls, she lists increased use of the library and reference material, increased ease of reinstatement for the child who has been absent, decrease in the number of indifferent and helpless students, almost complete absence of study hall problems, marked improvement in grades, and evidence of unusual development in the teachers themselves.

As may be seen in the article by Mrs. Skinner, the Morrison plan adds to the desirable features of the Dalton plan an original formula to check (in fact, "check and double check") individual progress and thus determine where the instructor may best give aid and guidance.

The name "contract plan" is borrowed from the business world to designate an assignment adjusted to the varying needs of pupils and accepted by them individually. Contract usually means a mutual agreement between two parties—here, the pupil and the instructor—and frequently implies written evidence of such an agreement. In this case the agreement is accompanied by guide sheets essential for free progress and a free time budget which lets each pupil decide for himself how best to get maximum results from his effort. The teacher who appreciates the relation of acceptance of responsibility to respect for self and self-directed growth and who has experienced the pleasure and satisfaction derived from consciousness that a self-imposed task is creditably finished, may find time well spent in reconsideration of such methods.

A SURVEY OF HIGH SCHOOL COURSES IN FAMILY RELATIONSHIPS. One of the important features of the work undertaken this year by the department of supervisors and teachers of home economics in the National Education Association was a cooperative study of "subject matter basic to the development in the teaching of family relationships" made by a committee of which Miss Helen Goodspeed of Philadelphia was chairman. A progress report was presented at the February meeting in Detroit, and the final one was distributed to members in June.

The study was made by questionnaires sent to 500 teachers and supervisors in all parts of the country and was intended to summarize their

judgment on content, methods, time allotment, and placement of unit courses in both junior and senior high schools and of term courses in senior high schools. The 213 questionnaires returned came from 40 states and the District of Columbia, thus providing a broad picture of present practice regarding such courses.

Interesting points are brought out in the report. There is great variety in the names given to such courses. With three exceptions all were offered in the home economics department. Of the schools reporting, 35 per cent offered the work at junior high school level and 68 per cent at senior. Thirty-six per cent of the replies favored and 53 per cent opposed a full term course in the senior high school. In only 39 out of 157 schools reporting was the work on family relationships given as a separate course. A textbook was used in 49 out of 151 and a state outline in 139 out of 155. Child care was included in 108 out of 161. Fifty-one out of 158 believed in a separate course, the other 107 preferring to see it included as a unit in a course in child care or home management. The methods most in use were discussion (87 per cent), lecture (44 per cent), case study (52 per cent), student reports (77 per cent), occasional talks by specialists (52 per cent), question box (40 per cent). Other methods included field trips, projects, debates, contracts, observation, home visits, survey made by students of sources of material, score charts of home responsibilities, one-act plays written by girls. Forty-two per cent of the 90 replies noted cooperation from other departments of the school.

Interesting lists are also given of objectives, difficulties, experience, the training found most helpful by the teachers, and topics for course content. These suggest wholesome variation in detail but a uniform purpose to make the work help the girl to understand and adapt herself successfully to her family, her friends, and her community.

NATIONAL CONGRESS OF PARENTS AND TEACHERS. The resolutions adopted by a convention are often an excellent index to the nature and character of its work, especially if one takes into consideration not only the contents of the resolutions themselves but also the method by which they are prepared and adopted. From both points of view the resolutions passed by the National Congress of Parents and Teachers at its thirty-fifth convention, held in May at Hot Springs, Arkansas, are well worth studying.

The resolutions committee, of which the chairman is Miss Charl Williams, legislative secretary of the National Education Association,

began its work several months in advance, collecting the resolutions offered at the six previous conventions, consulting with well-informed persons both within and without the organizations, and submitting a tentative set of resolutions for 1931, first to the staff and a few members of the Congress and then after revision, to state and national leaders in parent-teacher work. After the latter had sent in criticisms and suggestions, the resolutions were drawn up for consideration by the full committee at its first meeting in Hot Springs. The form then decided on was submitted to the body of delegates on the first day of the convention. The committee received additional suggestions up to the close of the second day and read these to the convention on the third day. The entire draft was printed and distributed on the last day, when the resolutions were read to the convention, discussed, and passed, one by one. In this way, they may truthfully be said to represent the deliberate judgment of the delegates to the convention.

It is impossible to give all twenty-eight resolutions, but we quote below those of greatest interest to JOURNAL readers, together with the preamble.

The National Congress of Parents and Teachers has labored throughout the thirty-four years of its history for the rights of children and for the conservation of childhood, and recognizes the Children's Charter as a dramatic and concrete expression of its fundamental objectives.

The Congress offers the following resolutions as a guide in achieving the aims of the Children's Charter, and urges state branches and local associations to give their whole-hearted cooperation and support to a realization of the principles herein set forth:

Trained Leadership. We stand for trained leadership for all units, departments and study groups of the National Congress of Parents and Teachers, realizing that it will promote and clarify the spirit of cooperation between home and school and will eliminate interference in school administration, sectarian and partisan controversies and participation in commercial enterprises.

Parent Education. Recognizing parent education as the first essential for building better homes and rearing finer boys and girls we advocate the organization of parent education groups on all age levels in each association and the development of a strong program of home-making in all schools. We further urge that every effort be made to give individual parents an opportunity to understand the progressive phases of development through which every child passes.

Character Education. We believe that home and school programs should include activities which will foster in the child the highest qualities of spiritual, mental and moral character, and which will inculcate a love of the beautiful in nature, in art and in noble human relationships.

Thrift. We urge the teaching of thrift both in home and school in the use of time, talent and resources.

Safety. We believe in education for safety and appreciate the significance of home and school cooperation in protecting children from hazards to which modern life subjects them.

Training for Leisure. We believe that a positive program of opportunities for the wholesome use of leisure should be offered by every community and that to this end we should lend our sympathy and support to local governmental provision of such opportunities in both city and country; and we further believe that our support and sympathy should be given to those phases of school curricula which aim to train boys and girls for the Right Use of Leisure.

Maternity and Infancy Legislation. We favor the passage of adequate legislation for the promotion of maternal and child hygiene, with provision for adequate cooperation between the health and educational agencies of the Federal Government and for the administration of the act by the United States Children's Bureau. We stand for adequate appropriations for rural health work and for district, county or community organization for health, education and welfare.

Bureau of Home Economics. We favor adequate appropriations to the Bureau of Home Economics in the United States Department of Agriculture, for research and information service in foods, clothing, household equipment, and other problems of family economics, from the point of view of the well-being of the family and the home.

Child Labor. We urge state branches, pending the ratification of a Child Labor Amendment to the United States Constitution, to work for the passage of state laws which will protect children from exploitation.

Radio. We believe that radio broadcasting is an extension of the home; that it is a form of education; that the broadcasting channels should forever remain in the hands of the public; that the facilities should be fairly divided between national, state and county governments; that they should be owned and operated at public expense and freed from commercial advertising.

Motion Pictures. We stand for cleaner and better motion pictures; condemn indecent appeals in motion picture advertising; and declare our disapproval of the system of blind-booking and block-booking of films.

Adequate Support of Education. We pledge ourselves to work for adequate and equitable support for public education.

We urge the United States Office of Education to make a survey of the rural schools of the Nation in order to ascertain their status and needs, and to define more clearly the contribution which they may make to scientific agriculture and to a worthy rural life.

We stand for equal opportunities for all children, rural and urban, and believe it is the responsibility of local, state and Federal governments to provide financial aid for such educational opportunities as will assure every child a fair start in life.

We stand for teachers of training, character and culture; for adequate tenure and retirement laws for teachers, and for a single salary schedule for all teachers of equal training and experience, regardless of sex.

A Federal Department of Education. While education is a matter of state and local concern, we recognize the need for its promotion by the Federal Government and pledge our support to the movement to create a Federal Department of Education with a Secretary in the President's Cabinet.

EVAPORATED MILK AND SWEETENED CONDENSED MILK. Most home economists probably know the difference between these two types of canned milk and their uses, but according to manufacturers and the United States Food and Drug Administration, this is by no means the case among housewives in general. It would be of assistance to all concerned if teachers of food and nutrition would drive home the simple facts of the case.

The issue is, of course, confused by the fact that the two terms are not logically distinctive and are not so considered in legal rulings about the products. Both types of milk are condensed by evaporation of a considerable proportion of the original water. Common usage alone says that "evaporated" shall apply to the unsweetened product and "sweetened condensed" to that to which sugar has been added. The point insisted on by the United States Food and Drug Administration is that when sugar is added, this fact shall be indicated in the designation.

Evaporated milk is the term commonly used for milk from which from 75 to 88 per cent of its water has been removed and to which nothing has been added. In the usual process of preparation, pure, fresh, whole milk is heated to about 203°F. in a forewarmer, then drawn into a vacuum pan where the water is evaporated under about 25 inches of mercury; homogenized to break up the particles of butter fat, to distribute them thoroughly, and to prevent their separating from the rest of the milk; then cooled and placed in sterile tin containers which are immediately sealed and sterilized.

The term sweetened condensed milk is ordinarily used to designate pure, fresh, whole milk to which pure sugar (sucrose) is added, usually in the proportion of about eighteen per cent by weight. After sweetening and forewarming, about the same proportion of water is removed as in the case of evaporated milk; the material is then canned, but it is not homogenized nor sterilized in the can. The forewarming generally kills any harmful bacteria that may be present and the added sugar acts as a preservative. Sucrose forms from forty-two to forty-five per cent of the finished product.

The differences in the way in which the two products are to be used correspond to the differences in their composition.

In cookery, evaporated milk, plus about the same amount of water, can easily and generally be substituted for fresh milk. It can be whipped and is said to treble its volume, whereas ordinary whipping cream only doubles. Sweetened condensed milk, plus a similar amount of water, is equivalent to whole fresh milk and sugar and may be substituted for

them in any recipes that use both. Recipes adapted to its use are put out by the manufacturers and are appearing more and more commonly in cookery books, especially those on camp cookery.

In infant feeding both evaporated and sweetened condensed milk may be successfully used, under the guidance of a physician, as in the case of infant foods in general.

In short, what the housewife needs to know is that evaporated milk means simply concentrated milk and that sweetened condensed milk means concentrated milk to which considerable sugar has been added.

THE PURE FOOD AND DRUGS ACT. On June 30, 1931, Dr. W. G. Campbell, chief of the Federal Food and Drug Administration, released to the press a summary of its purpose, accomplishments, and aims from which a few paragraphs are worth quoting.

The years immediately preceding and succeeding the passage of the pure food law were marked by an awakened public consciousness of the evils and malpractices of the time. Lincoln Steffens was exposing the shame of misgovernment in large American cities. Upton Sinclair had written "The Jungle," pillorying the meat packers. Ida M. Tarbell was uncovering the cynicism and dishonesty of early Standard Oil operations. It was an age of exposure of unethical and demoralizing practices, and a wave of public indignation against the evils of food and drug manufacturing brought the Federal food and drugs act into being.

Before the law was passed, the food and drug industry picture was in the chromo stage. As the result of crude methods in food manufacturing, the buyer suspected commercially prepared foods—and with reasons. The medical quack and the patent medicine charlatan plied their trade from the itinerant buckboard and the mixing tub. Swampweed nostrums, worthless in the treatment or cure of disease, were sold everywhere. Commercially packed foods were usually adulterated, sometimes with dangerous chemicals, as ingredients of dyes and preservatives. So unethical were the practices of some food manufacturers and dealers that the many honest producers had little opportunity of profiting by the sale of quality goods.

The passage of the pure food law marked the beginning of a great change for the better in food and drug manufacturing. The change was neither spontaneous nor instantaneous. A carry-over of opposition to the bill, and inability promptly to readjust manufacturing practices, delayed compliance. Regulatory agencies enforcing the new law had no difficulty in finding violations. Adulteration and misbranding were common in the early days, but it was not possible to secure immediate correction, because enforcing officials were handicapped by the lack of technical means of detecting all forms of adulteration. Government scientists devoted attention to the formulation of analytical methods, and other Federal officials seized products found to be in violation of the law, prosecuted offenders, or educated the trade in improved processes. The public, losing much of its earlier distrust increased its purchases progressively with improvement in quality of the goods. . . . .

The 25 years since the passage of the food and drugs act have seen some of the most important developments that have ever occurred in the history of food and nutrition. The dietary habits of Americans have changed materially. The use of such foods as milk, sugar, vegetables, fruits, has increased greatly and the consumption of cereals has declined. Vitamins, a comparatively recent discovery, have assumed an important place in the thought of the consuming public and in the regulatory activities under the law of the Food and Drug Administration. So important, indeed, have they become that the Administration plans the establishment of a laboratory for the study of vitamins in order to make possible regulatory work in connection with products labeled as containing these important food elements. The 25 year period has witnessed pioneer work in the technic of processing fruits and vegetables, which has made possible material and beneficial reform in the methods of various food industries. . . . .

The initial purpose of the food and drugs act: first, to safeguard the purity of foods and drugs—second, to protect consumers from economic fraud through the purchase of mislabeled or adulterated goods, has not been changed. . . . . More than 18,000 legal actions, under the law, have contributed to the satisfactory reformation of American manufacturing processes and to the great improvement in the quality of our foods and drugs. There are still, however, in every industry a minority of dealers who, in order to make an unfair profit, take advantage of every opportunity to adulterate and misrepresent their products. Vigilance is ever necessary to protect consumers and to prevent a return to previous demoralizing trade conditions. The Administration, in the coming months, plans no change in administrative policy in enforcing the law but, so far as appropriations permit, intends to continue its activities covering the vast and growing field of food and drug manufacturing and importing.

The pure food law has come of age. Brought into being by a surge of public indignation against existing conditions and having been carried forward in the earlier years by a wave of public approval, the act steadily has gained popular endorsement. This is proved by the favorable reaction met by the Administration's recently inaugurated radio campaign, designed to teach consumers how to read labels on foods and drugs, and its system of informing the public through the press. And the recent passage of the McNary-Mapes amendment to the act proves that the food manufacturing trade itself would be the last to desire to have the law weakened or abolished. The American public in general, I believe, considers that its investment of approximately one cent per capita per year to pay for the enforcement of the food and drugs act is an excellent bargain.

DURABILITY OR NOVELTY? Shortly after his return from South America, the Prince of Wales spoke before the Manchester Chamber of Commerce about the possibilities of British trade on that continent. One of his points was that public taste was changing in ways not always recognized by his countrymen. As quoted in the *Times Educational Supplement*, he said:

We used to sell our goods mainly on their quality and durability; today the majority of people desire goods that won't last so long.

They have, I believe, got into the habit of liking a change for the sake of change.

The taste of the world is in fact becoming as fickle as women's fashions.

To compete with foreign prices we should sacrifice some of the high finish and solidity we have been accustomed to give, without affecting mechanical efficiency and usefulness.

In this country we are only too conscious of such changes, and also that they are playing havoc with old-fashioned ideas of thrift in the selection of all kinds of household goods. Home economists, who are supposed to tell what is wise in such choices, would like to know how far it is, personally and socially, good economy to follow the suggestions of advertisers that we replace our watches and our supposedly "life-time" furniture as soon as the appearance of new models makes them "obsolescent." For a time, business philosophy was inclined to tell us that that way lay prosperity, but its tone seems no longer so assured. A good balance between durability and attractiveness appears to be coming back into favor, along with less encouragement to pledge next year's bread money for this year's cake.

Maybe His Royal Highness is correct about British goods, but we can't help hoping that British and Americans alike may find a happy mean between the extremes of conservatism and desire for novelty. Economically, as well as esthetically, we suspect William Gray Purcell was right when he said in his "Lamps of Home Building" in *The Small Home* for July that the opportunity for satisfactory living would come "when we cease to make more things than we need, desire only things that satisfy, and demand a quality in everything that will eliminate constant replacement."

RESEARCH

ECONOMY OF CABBAGE, CARROTS, AND SPINACH AS AFFECTED BY TYPE OF MARKET, SEASON, AND METHOD OF COOKING WITH SPECIAL REFERENCE TO CALCIUM AND PHOSPHORUS[1]

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RECENT progress in nutrition emphasizes the desirability of studying the economy of various foods. Thompson, Feely, and Fillmore (1) have considered the relative cost of nutrients with special reference to actual cost of edible material in a variety of vegetables obtained from different markets. Many workers have contributed to the knowledge of total mineral loss in cooking vegetables. Some few have investigated losses of the individual ash constituents, particularly calcium, phosphorus, magnesium, and iron.

It seemed of interest to study further the amount of waste in different lots of cabbage, carrots, and spinach purchased in different seasons and from different types of stores. It also appeared desirable to consider these vegetables with particular regard to calcium and phosphorus content, and, at the same time, to observe the losses of these elements with two different methods of cooking commonly used in the home, namely, boiling in a small amount of water and cooking in a waterless cooker. While home economists do not generally recommend that cabbage be cooked in a tight container and a small amount of water, yet the popularity of the waterless cooker with the housewife at the time of this study suggested the desirability of obtaining data for cabbage as well as the other vegetables.

The first purchase of the vegetables used in this study was made in February, the second in April. These represented typical winter and spring months, thereby making a seasonal study possible.

[1] Based on a thesis submitted by Marian E. Brookover in partial fulfillment of the requirements for the degree of master of science. The authors are greatly indebted to Miss Myra T. Potter, technician, for valuable laboratory assistance.

A supply of a given vegetable was obtained at the same time from each of four types of stores: a store of the self-service type (A), a neighborhood grocery (B), one of the best delivery stores which catered to high-class trade (C), a delivery store which held frequent bargain sales (D). These stores often differed in the prices charged for the vegetables. Special records were made of the products from each store, the object of this part of the study being to determine whether the lowest-priced vegetables really were cheaper when edible material was considered. No attempt was made to secure choice products; the aim was rather to take what the grocer had to offer on the assumption that it would be representative of what the local housewife might receive.

Preparation of the Vegetables. Every effort was made to standardize the processes of preparation of the vegetables. They were weighed as purchased (a.p.) after which they were variously treated according to kind. The washing was done very quickly with distilled water and the drying was carefully controlled as a special precaution against changes in weight due to absorption of water or losses of nutrients.

In the case of carrots the tops were removed, the upper green portion was cut away, and the roots scraped lightly, care being taken to remove as little as possible of the inner portion. They were then cut crosswise into $\frac{1}{8}$-inch slices by means of a commercial vegetable slicer.

Cabbage it was found unnecessary to wash, since with the removal of the coarse, outer leaves a clean surface was exposed. The head to within half an inch of the core was then cut into $\frac{1}{8}$-inch shreds with the same device as that used in slicing carrots. The core was considered as waste.

Of the spinach the coarse, discolored leaves and approximately one inch of the leaf stems were removed. The spinach was then washed very quickly under running water, a small amount at a time, after which it was spread in a thin layer on an absorbent surface and allowed to stand at room temperature until all noticeable surface water had evaporated. The time of evaporation varied with the temperature, which could not be controlled, but care was taken not to have the spinach stand longer than was necessary to accomplish the drying, lest weight be lost through evaporation of the water contained in the vegetable itself.

The prepared vegetables were weighed again and these weights recorded as the edible portion (e.p.). A sample from each lot of edible portion, uncooked, served as a control.

The waterless cooker used consisted of a light-weight, tightly closed aluminum vessel with a removable base; an enamel Berlin kettle with a tight cover served in boiling the products.

Since the shrinkage during cooking varied greatly with the different vegetables, and since it seemed desirable to furnish quantities after cooking that would be comparable to those used by the housewife, the amount of raw material used in each case varied from 500 to 1,000 gm., e.p.

Distilled water was used for cooking, the amount varying with each kind of vegetable. For the boiled carrots and cabbage, boiling water was added until it was just visible beneath the vegetable. In the so-called "waterless-cooked" carrots and cabbage a very small amount of water was added as recommended by the manufacturer of the cooker, but practically all of it was found to have evaporated at the end of the cooking period. For both methods of cooking spinach, only that water which clung to the leaves after washing was used. The time of cooking was also determined by the character of the vegetables, the process being continued until the products were pronounced "tender" as tested by piercing.

After cooking, the vegetables were drained in a wire sieve until just cool to the touch, this time also varying with the kind of vegetable. They were then weighed to determine the cooked weight, then dried to constant weight at approximately 80°C. Calcium was determined as recommended by McCrudden (2) and phosphorus by the volumetric official method (3). All determinations were made in triplicate. Known solutions of calcium and phosphorus were analyzed to insure accuracy of methods.

Figures for waste and cost are given in table 1. The average percentage of waste was not very different for the three vegetables, being 26 per cent for spinach, 27.5 per cent for cabbage, and 29 per cent for carrots. Spinach thus appears the least wasteful; but in the case of that purchased in February at store D the actual waste was probably a bit higher than the figures indicate because the coarse, hollow stems seemed to retain water from washing, thus increasing slightly the weight of edible material.

Comparing the data for seasonal variation, the average difference in waste does not seem to be very great, but in each case it is slightly higher for the winter months, ranging from 28 to 32 per cent for February and from 24 to 27 per cent for April. This may be explained by the fact that the spring-purchased vegetables were usually fresher and in better condition. Some exceptions will be noted, particularly one lot of February spinach which averaged only 14 per cent of waste.

The so-called cheaper stores did not always sell their vegetables more cheaply. Thus, in April, cabbage sold for 5 cents per pound in all the stores, but the cost of edible portion ranged from 6.2 to 7.9 cents per

pound—a difference of 1.7 cents. The most expensive product in that instance came from the high-class delivery store (C) and the least expen-

TABLE 1

Comparison of cost and waste of vegetables purchased in February and April at stores of four types

VEGETABLE AND MONTH OF PURCHASE	STORE[1]	COST PER POUND		PERCENTAGE OF TOTAL WEIGHT	
		As purchased	Edible portion	Edible portion	Waste
		cents	*cents*	*per cent*	*per cent*
Cabbage purchased in February	A	7.5	12.9	58	42
" " " "	B	7.0	9.2	76	24
" " " "	C	7.0	8.8	80	20
" " " "	D	5.0	6.7	75	25
Average		6.6	9.4	72	28
Cabbage purchased in April	A	5.0	6.7	74	26
" " " "	B	5.0	6.7	74	26
" " " "	C	5.0	7.9	63	37
" " " "	D	5.0	6.2	81	19
Average		5.0	6.9	73	27
Grand Average		5.8	8.1	72.5	27 5
Carrots purchased in February	A	8.3	11.5	72	28
" " " "	B	8.3	12.4	67	33
" " " "	C	8.3	12.0	69	31
" " " "	D	8.3	13.2	63	37
Average		8.3	12.3	68	32
Carrots purchased in April	A	5.0	6.7	75	25
" " " "	B	7.5	10.4	72	28
" " " "	C	7.5	9.7	77	23
" " " "	D	9.4	12.9	73	27
Average		7.4	9.9	74	26
Grand Average		7.9	11.1	71	29
Spinach purchased in February	A	10.0	15.1	66	34
" " " "	B	10.0	14.0	71	29
" " " "	C	12.5	14.5	86	14
" " " "	D	10.0	15.6	64	36
Average		10.6	14.8	72	28
Spinach purchased in April	A	15.0	18.8	80	20
" " " "	B	10.0	13.2	76	24
" " " "	C	12.0	16.7	72	28
" " " "	D	10.0	13.2	76	24
Average		11.8	15.5	76	24
Grand Average		11.2	15.2	74	26

[1] A. Small neighborhood grocery.
B. Cash and carry chain store.
C. High class delivery store.
D. Delivery store with frequent bargain sales.

sive from the bargain store (D). On the other hand, carrots which all stores sold at the same price in February varied in cost of edible portion from 11.5 to 13.2 cents per pound—again a difference of 1.7 cents; but this time the best bargain came from the neighborhood grocery (A) and store D was most expensive. The frequency with which the cheapest and dearest products were furnished by the four stores is shown in table 2.

TABLE 2

Frequency of occurrence of cheapest and most expensive vegetables in stores of four types

STORE	CHEAPEST PRODUCT		MOST EXPENSIVE PRODUCT	
	As purchased	Edible portion	As purchased	Edible portion
A	1	2	2	2
B	0	1	1	0
C	0	0	1	1
D	1	2	1	3

The figures were too few to give definite information concerning costs. In some cases the vegetable which was cheapest as purchased was also the cheapest on the basis of edible portion, but this was not always the case. The price did not always seem to be related to the condition of the vegetable as indicated by the amount of waste.

When cost per pound of raw vegetable was considered, cabbage was decidedly the cheapest of the three kinds, though spinach had a somewhat lower percentage of waste. The amount of waste seemed to be largely dependent upon the condition of the vegetable. For example, one lot of cabbage was badly withered; another was much crushed and broken. The carrots yielding the lowest percentage of edible material were bought at a special sale; the bunches were irregular in size and often imperfect, sometimes containing more tops than carrots. Another lot had such a rough surface that there was much loss in scraping. Two lots of the February spinach showed over 30 per cent waste because of coarse stems and discolored leaves; on the other hand, one lot showed only 14 per cent. That purchased in April was home-grown and more uniformly young and fresh, with correspondingly similar proportions of edible material.

The figures for losses of minerals in cooking are shown in tables 3 and 4. They show such losses to be to some extent dependent upon the method of cooking used, tending to be greater when the vegetables are boiled than when cooked in the waterless cooker. No such differences are to be observed or expected for spinach, since the amount of water used for cooking it in the two different types of utensils did not vary, and there

was no liquid to discard. The saving of phosphorus in waterless cooking was greater than that of calcium. The results seem to indicate that in the vegetables studied, waterless cooking occasions less loss of calcium

TABLE 3

Average proportions of calcium and phosphorus in raw and cooked cabbage, carrots, and spinach

VEGETABLE AND MONTH OF PURCHASE	CALCIUM			PHOSPHORUS		
	Raw	"Waterless cooked"	Boiled	Raw	"Waterless cooked"	Boiled
	per cent	*per cent*	*per cent*	*per cent*	*per cent*	*per cent*
Cabbage purchased in February	0.058	0.039	0.036	0.030	0.025	0.023
Cabbage purchased in April	0.060	0.052	0.045	0.039	0.031	0.021
Average	0.059	0.046	0.041	0.035	0.028	0.022
Carrots purchased in February	0.043	0.040	0.034	0.028	0.025	0.023
Carrots purchased in April	0.040	0.036	0.034	0.045	0.039	0.030
Average	0.042	0.038	0.034	0.037	0.032	0.027
Spinach purchased in February	0.115	0.098	0.096	0.067	0.054	0.054
Spinach purchased in April	0.118	0.115	0.112	0.068	0.053	0.053
Average	0.117	0.107	0.104	0.068	0.054	0.054

TABLE 4

Average loss of calcium and phosphorus in vegetables "waterless cooked" and boiled

VEGETABLE AND MONTH OF PURCHASE	CALCIUM		PHOSPHORUS	
	"Waterless cooked"	Boiled	"Waterless cooked"	Boiled
	per cent	*per cent*	*per cent*	*per cent*
Cabbage purchased in February	33.74	36.55	16.67	23.33
Cabbage purchased in April	13.33	25.00	20.51	46.15
Average	23.0	30.8	18.6	34.7
Carrots purchased in February	6.98	20.93	10.72	17.86
Carrots purchased in April	10.00	15.00	13.34	33.34
Average	8.5	18.0	12.0	25.6
Spinach purchased in February	14.78	16.52	19.40	19.40
Spinach purchased in April	2.54	5.09	22.06	22.06
Average	8.66	10.8	20.7	20.7

and phosphorus than does boiling, providing it involves a decrease in the amount of water used.

The changes in the mineral content of the cooked vegetables cannot be said to be due to seasonal differences, since the average calcium and

phosphorus content of the raw vegetables was very similar for those purchased in winter and spring months. The losses of calcium in cooking were consistently higher in the February cabbage and spinach but not in carrots, but this was not true of phosphorus.

Since recent research indicates that the calcium and phosphorus content of vegetables may vary greatly with soil, water, and other condi-

TABLE 5

Average water, calcium, and phosphorus content of vegetables as determined by various investigators

VEGETABLE	WATER			CALCIUM		PHOSPHORUS	
	Brookover and Pittman	Bull. No. 28 (4)	Peterson and Hoppert (5)	Brookover and Pittman	Sherman (6)	Brookover and Pittman	Sherman (6)
	per cent	*per cent*	*per cent*	*per cent*	*per cent*	*per cent*	*per cent*
Cabbage	92.4	91.5	93.1	0.058	0.045	0.040	0.029
Carrots	91.4	88.2	88.9	0.042	0.056	0.036	0.046
Spinach	90.8	92.3	92.9	0.118	0.067	0.068	0.068

TABLE 6

Average cost and weight of vegetables required to furnish 0.067 gram of calcium and 0.132 gram of phosphorus (one-tenth of the amount set by Sherman as a day's supply)

VEGETABLE AND METHOD OF PREPARATION	CALCIUM			PHOSPHORUS		
	Cost	Weight		Cost	Weight	
		As purchased	Edible portion		As purchased	Edible portion
	cents	*pounds*	*pounds*	*cents*	*pounds*	*pounds*
Cabbage, raw	2.0	0.34	0.25	6.7	1.15	0.83
Cabbage, "waterless cooked"	2.6	0.44	0.32	8.4	1.44	1.04
Cabbage, boiled	2.9	0.50	0.36	10.6	1.82	1.32
Carrots, raw	3.9	0.49	0.35	8.8	1.11	0.79
Carrots, "waterless cooked"	4.3	0.55	0.39	10.1	1.28	0.91
Carrots, boiled	4.8	0.61	0.43	12.0	1.52	1.08
Spinach, raw	1.8	0.16	0.12	6.5	0.58	0.43
Spinach, "waterless cooked"	2.1	0.19	0.14	8.1	0.72	0.53
Spinach, boiled	2.1	0.19	0.14	8.1	0.72	0.53

tions under which they grow, it seemed interesting to compare the analyses made in this study with those of other investigators. This is done in table 5. The average water content of the vegetables here analyzed is found to agree quite well with the figures commonly used, though individual determinations varied considerably. The average amount of calcium and phosphorus present, as determined by these

analyses, appears to be somewhat high when compared with standard figures. This is especially true of spinach.

Following the plan of Thompson and co-workers (1) the cost and weight of these vegetables required to supply one-tenth of what Sherman has set up as a day's supply of calcium (0.67 gm.) and phosphorus (1.32 gm.) were computed as shown in table 6. For a given weight of vegetable, raw or cooked by either of the methods described, with one exception spinach ranked first, cabbage second, and carrots third in calcium and phosphorus content. The cost ran parallel; spinach was most economical; cabbage intermediate; and carrots most expensive as a source of calcium and phosphorus.

Summary and Conclusions. Cabbage, carrots, and spinach were studied with regard to percentage of waste, calcium and phosphorus content, and loss of these minerals in cooking. The vegetables were purchased from four types of local stores in one winter and one spring month. For each purchase of vegetables, determinations were made of the waste, the edible portion, and the calcium and phosphorus of the raw and cooked product. From these experiments, the following conclusions are indicated:

1. The vegetables from the so-called cheaper stores were sometimes but not always cheapter either per pound as purchased or when the edible material only was considered.

2. The amount of waste, determined largely by the condition of the vegetable, appears in general to be lower in the spring than in winter, though the average difference for cabbage is not significant.

3. The calcium and phosphorus content of these vegetables varied greatly with individual samples, thus confirming the results of other workers.

4. The average of the calcium and phosphorus of the raw vegetables studied, showed practically no seasonal variation.

5. Waterless cooking conserved more of the calcium and phosphorus in cabbage and carrots than did boiling. Spinach could not be considered in this respect, as the amount of water used for this vegetable did not vary in the two methods of cooking.

6. With the prices prevailing at the time of this study cabbage and spinach were cheaper sources of calcium and phosphorus than carrots. This was true, with one exception, whether the vegetables were raw or cooked. On the other hand, per pound of edible portion, cabbage was the cheapest, carrots second, and spinach the most expensive as a source of these minerals.

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BOOKS AND PERIODICALS

NEW BOOKS

Girls and Their Problems. By MILLICENT M. COSS. Boston: Ginn and Company, 1931, pp. 249, $1.52.

The head of the home economics department at the Framingham (Massachusetts) State Normal School draws on her long and successful teaching experience in this textbook, which is intended to vitalize certain personal, social, and home problems of girls, and to suggest to them and to their teachers and leaders how they may find the solution of these problems. The four sections consider the problems of the girl and her friends, of her family and home, of her community, and of her future. The many well-chosen references point the way to much of the best information now available on home economics subjects.

An Introduction to Homemaking and Its Relation to the Community. By WILLIE MELMOTH BOMAR. Philadelphia: W. B. Saunders Company, 1931, pp. 241, $2.00.

A welcome attempt by the head of the home economics department at Kansas State Teachers College, Pittsburg, to provide a textbook which will introduce the study of homemaking as a profession. Based on material used in an orientation or survey course for college freshmen, it centers attention on family life in relation to community life and on the child as the center of family life, and endeavors to interest students in homemaking as a personally satisfying and socially valuable profession.

A Basis for Building a Course in Economics of the Home. By FRANCES HOWE LEIGHTON. New York: Bureau of Publications, Teachers College, Columbia University, 1931, pp. 114, $1.50.

Problems emerging from interviews with 75 selected families in New York City are grouped by jury vote under 9 topics, and elaborated to throw light on solutions tending to make possible a higher standard of living through more efficient use of income and better household management.

The Creation of a Home. By EMILY NEWELL BLAIR. New York: Farrar & Rinehart, 1930, pp. 279, $2.50.

A well-known writer and politician whose public work has not lessened her personal interest in or sense of the value of home and family life, here brings together in informal, readable chapters the things which she thinks would aid her newly-married daughter in establishing a home of her own. Guiding principles are to remember that the home should satisfy the family's desires for comfort, peace, and beauty; to distinguish between the essentials and nonessentials of satisfactory home life; to realize the esthetic as well as practical values of simplicity; and to make housework a congenial job by taking advantage of all modern resources for lessening housekeeping routine and by bearing in mind its wider social and economic significance.

Trott and His Little Sister. By ANDRÉ LICHTENBERGER. Translated from the French by Blanche and Irma Weill. New York: The Viking Press, 1931, pp. 245, $2.50.

The first English translation of a book which has been a European favorite for thirty years because of the charm and keenness of perception with which it depicts the feelings of a little French boy and his baby sister. Readers who imagine that understanding of the small child's developing personality depends entirely on psychological research will be amazed that observation and divination could have painted such a picture before the advent of that science. The "Manners and Customs of Mlle. Lucette at the Age of One Year" and the "dramatic fragments" descriptive of one morning in the household of which she is the conquering center are among the chapters that would delight home economics classes in child care.

Prohibition Punches. By ROXANA B. DORAN. Philadelphia: Dorrance & Company, Inc. 1930, pp. 93, $1.50.

A much-advertised "book of beverages" by the wife of the recent U. S. Commissioner of Prohibition, with forewords by Harvey W. Wiley and Louise Stanley. The recipes are somewhat loosely classified under such heads as "Top o' the Morning," "When Shadows Are Shortest," "In the Gloaming," "The Children's Hour."

Chemistry for Students of Agriculture and Home Economics. By ROBIN CHARLES BURRELL. New York: McGraw-Hill Book Company, Inc., 1931, pp. 459, $3.50.

A textbook intended for the student whose concern with the subject is "that of a man or woman of broad interests and culture" rather than of the professional scientist, and which aims to present fundamental theories upon which applied chemistry rests and also what it means in everyday affairs. Presupposes a thorough course in inorganic chemistry, preferably including elementary qualitative analysis. Adapted for use in daily two-hour periods without reference to formal division into class days and laboratory days.

The Changing Educational World, 1905–1930. Edited by ALVIN C. EURICH. Minneapolis: The University of Minnesota Press, 1931, pp. 311, $3.00.

Twenty-five essays by well-known educators assembled in celebration of the twenty-fifth anniversary of the College of Education at the University of Minnesota. Of special interest to JOURNAL readers are perhaps "New Problems in Education" by William John Cooper, "Forces behind Education in Europe" by Paul Dengler, "Trends in Secondary School Organization" and "Research in Secondary Education" by Harl R. Douglass, and "Training Doctors of Philosophy in Education" by Alvin C. Eurich.

Social Changes in 1930. Edited by WILLIAM F. OGBURN. Chicago: The University of Chicago Press, 1931, pp. 204, $1.50.

The fourth of an annual series on social changes, reprinted from *The American Journal of Sociology* and, intended to keep sociological readers abreast of developments by presenting important fields of progress. Among topics of special concern to home economics are perhaps "Medicine and Public Health" by Harry H. Moore, "Community Organization" by LeRoy E. Bowman, "Rural Life" by Bruce L. Melvin, "The Family" by Ernest R. Groves, "The Child" by Lawrence K.

Frank, "The Status of Women" by Chase Going Woodhouse, "Education" by Charles H. Judd.

The Support of the Aged. By the NATIONAL INDUSTRIAL CONFERENCE BOARD, INC. New York: National Industrial Conference Board, Inc., 1931, pp. 65, $1.00.

"A review of conditions and proposals" for the care of the aged prepared by the National Industrial Conference Board with the help of its advisory committee on industrial relations and embodying the results of special investigation. The conclusion is reached that the various state pension laws in this country result in systems closely related in practice to poor relief, whereas in Europe there is a trend toward contributory forms of state insurance against old age; and that "a similar development is to be expected in this country if the present state pension measures . . . . become identified as part of a general system of social insurance."

A Systematic Source Book in Rural Sociology. Vol. II. Edited by PITIRIM A. SOROKIN *et al.* Minneapolis: The University of Minnesota Press, 1931, pp. 677, $6.50.

The second volume in a series of carefully selected and arranged readings of which the first was noted in March. Dealing with "the rural social world, from the point of view of its institutional, functional, and cultural characteristics," it includes considerable material of interest to home economics, especially in the chapters on "The Family," "Rural Social Control," and "Esthetics and Recreation." Among selections of general interest are those on rural political movements in different periods and regions, including Asia as well as Europe and America.

Social Work Administration. By ELWOOD STREET. New York: Harper & Brothers, 1931, pp. 467, $3.00.

The director of the Community Chest of Washington, D. C., who is also an experienced teacher of his subject, here brings together information on the fundamentals of the administration of social work in the hope of producing "an instrument for clean-cut administrative procedure by managers of organized activity—managers, actual and potential" and for the purpose has drawn on long observation and experience of workable practices. Many of the points made are equally applicable in education or general organization work.

Yearbook of Agriculture, 1931. United States Department of Agriculture; MILTON S. EISENHOWER, editor, and ARTHUR P. CHEW, associate editor. Washington, D. C.: United States Government Printing Office, 1931, pp. 1113, $1.50.

A summary of the year's progress by the Secretary of Agriculture, some 350 pages of very brief articles about special features of the work of various bureaus, and 500 pages of statistics. Topics of papers from the Bureau of Home Economics are: child welfare studies, clothing costs among 1,425 farm families, cooking time of beef roasts, cottonseed flour rich in vitamin G, fabrics for children's play suits tested for resistance to weather, revision of food composition tables, meat keeping in home refrigerators, oven canning tests, standard specifications for household buying, textile buying for the home, and watermelons as a source of vitamins A and G.

ABSTRACTS FROM PERIODICALS

CHILD DEVELOPMENT AND PARENTAL EDUCATION

EDUCATIONAL METHODS

The family center summer play school, LUCY RETTING. *Am. Childhood* **16,** No. 10 (1931, June) pp. 3–5 +.

An experimental family summer play group is here described which was conducted during July and August, 1930, in Public School 41, Manhattan. Forty children ranging in age from 4 to 13 from homes which lacked economic security enjoyed a program intended to develop appreciation of their immediate environment and including homemaking, arts and crafts, music, dramatics, and big-muscle activities. The experiment, besides meeting the need for such work, demonstrated the possibility of using the summer period to determine new practices for the winter school.

Exploitation of nursery school children, LULU R. LANCASTER. *Home Econ. News* **2,** No. 1 (1931, June) pp. 53, 55.

Warning is given of the danger incurred by the use of the nursery school as laboratory material for research work and observation, and procedures are suggested to safeguard the spontaneous activity for the encouragement of which the nursery school stands.

A group intelligence test suitable for younger deaf children, R. PINTNER, W. N. KELLOGG, and B. M. EAGLESON. *J. Educ. Psychol.* **22,** No. 5 (1931, May) pp. 360–363.

The validity of the Pintner primary non-language mental test for the intelligence of deaf children is established by the examination of 293 children in the lowest grade of two schools for the deaf. It is the first group intelligence test for use with young deaf children and is presented without language by means of pantomime and examples on the blackboard. The results with deaf children showed slightly higher norms than those with hearing children used as the controls.

Activity in character education, A. HELEN ANDERSON. *J. Nat'l Educ. Assoc'n* **20,** No. 6 (1931, June) pp. 201–202.

To make practical application of the theories of character development, Denver High School teachers devised home room projects which called for social, philanthropic, and managerial activities.

Child growth and school wastes, RICHARD D. ALLEN. *J. Nat'l Educ. Assoc'n* **20,** No. 6 (1931, June) pp. 205–206.

Finer opportunity for personal development rather than enlarged school plants is the expansion predicted for the near future. Sources of waste are unnecessary retardation, both positive and negative; improper classification; poor articulation; and lack of organized guidance.

Mental tests of young children, HAROLD ELLIS JONES. *New Era* **12,** No. 53 (1931, May) pp. 164–166.

Discussing the schedule of preschool tests employed at the University of California, the author holds that, although a greater refinement of the scales will be possible and more adequate criteria of intelligence may be obtained when the children already so tested shall have reached school age, present results appear consistent within a limited range and seem sufficiently valid to warrant their use.

The present situation in the English nursery school movement, GRACE OWEN. *New Era* **12**, No. 53 (1931, May) pp. 168–172.

More care in fulfilling the underlying ideals and purposes of the nursery school, gaining increased public confidence as a step toward greater educational and medical research, more carefully prepared teachers, more sympathetic understanding from local educational authorities, and more conscientious inspectors are listed as necessary if the nursery school is to be recognized as essential in the system of public education.

MENTAL HYGIENE

Mental quirks and physical ills, RACHEL ASH. *Child Welfare* **25**, No. 10 (1931, June) pp. 602–604.

States of mind in children induced by worry, fright, and dissatisfaction are shown to be causes for symptoms strongly suggestive of disease in some organ of the body.

The psychology of children's lies, MAURICE H. KROUT. *J. Abnormal Psychol.* **26**, No. 1 (1931, April–June) pp. 1–27.

Tentative differential study of types of lies, treated as problems in general behavior and by-products of socializing influences, and classified as misrepresentations, prevarications, and deceptions; with analysis of the mechanism of each type.

Everyday problems of the everyday child, DOUGLAS A. THOM, *J. Nat'l Educ. Assoc'n* **20**, No. 6 (1931, June) pp. 195–196.

Causes tending to produce the lazy child, the hyper-active youngster, or the child suffering emotional upset are discussed at length to show the need among teachers for understanding the intellectual capacity as well as joys and sorrows of childhood.

Mental hygiene in teacher-training institutions in the United States—a survey, CHARLES E. BENSON and LOUISE E. ALTENEDER. *Ment. Hyg.* **15**, No. 2 (1931, April) pp. 225–241.

Survey of 295 teacher-training institutions in the United States in January, 1930, shows that many institutions have enlarged their curriculum to include regular courses or special lectures in this field. However, universal recognition is desired because the subject gives a new significance to child psychology and child guidance and present emphasis is on the normal child and his needs as well as problem cases.

PHYSICAL DEVELOPMENT

Ultra light in California summer sunshine, JOHN M. FRAWLEY. *Am. J. Diseases Children* **41**, No. 4 (1931, April) pp. 751–757.

It is shown to be inadvisable in extremely hot climates to depend on sun baths for the prevention and treatment of rickets because of the small proportion of ultra-violet to visible light rays. Data given show great variation and in some instances deficiency in ultra-violet rays in sunlight at three different localities in California.

Intelligence and month of birth, RUDOLF PINTNER. *J. Appl. Psychol.* **15**, No. 2 (1931, April) pp. 149–154.

Data from the records of 4,925 school children of all ages and grades tested by different group intelligence tests show no evidence that the month of birth influences the I.Q. and hence do not support the extensively quoted claims of Blousky of Moskow that the month of the year in which a child is born has influence upon his bodily and mental growth.

The growth of social perception in different racial groups, W. N. KELLOGG and B. M. EAGLESON. *J. Educ. Psychol.* **22,** No. 5 (1931, May) pp. 367–375.

Following the procedure used by G. S. Gates for measuring growth of facial perception in white children, 232 negroes, aged 3 to 14 years, were tested for ability to interpret facial expression as an index to social perception. Six pictures of the Ruchmick series were presented one at a time to each subject who recorded his interpretation of the emotion represented. A rough relationship appeared between social perception ratings and the teacher's intelligence rating of the individuals. Negro girls appeared superior to negro boys. In general there was a similiarity in the findings for the two groups and neither race nor social status seemed to affect ability to interpret facial expression.

A medical problem that became a psychological problem, LOUISE NELSON. *Ment. Hyg.* **15,** No. 2 (1931, April) pp. 242–254.

The case of a boy is reported who, because of defective vision undiscovered until his eleventh year, became a psychological problem in spite of his average intelligence, good general health, and marked creative imagination.

The incidence and significance of finger-nail biting in children, DAVID MECHSLER. *Psychoanalytic Rev.* **18,** No. 2 (1931, April) pp. 201–209.

Frequency of finger-nail biting at different ages as discovered through observation of 3,000 children, including some from 1 to 17 years of age, in New York public schools and infants in public nurseries, shows that the practice does not occur under 3 years of age, may begin in the fourth year, jump into prominence in the sixth year, and maintain this constantly high level till puberty (12 years for girls and 14 years for boys), at which time it rises higher for two years and then drops rapidly. This study shows the possibility of the statistical method in measuring psychoanalytical problems, tends to confirm Freud's 3-stage division of the individual's psycho-sexual development, and suggests the futility of treating this particular predisposition as a "habit."

Heredity, environment, and developmental process, MAURICE H. KROUT. *Psychol. Rev.* **38,** No. 3 (1931, May) pp. 187–211.

Although the interests of the biologist in human development may center in physico-chemical substance and the "pocket of genes" and that of the social scientist in group culture and the individual which social interaction produces, these interests are shown not to be competing but rather to overlap frequently and to merge readily into the concept of a developmental process.

K. K.

FOOD AND NUTRITION

Contributed by the staff of the Nutrition Section, Bureau of Home Economics, United States Department of Agriculture

The vitamin A and D content of some margarines, DOROTHY FETTER and A. J. CARLSON. *Am. J. Physiol.* **96,** No. 2 (1931, Feb. 1) pp. 257–264.

"As tested on rats the animal fat margarine churned in whole milk is equal to butter in vitamin A content. The margarine with cocoanut oil as the content is very deficient in vitamin A. As tested by the cure of rickets in rats the oleo-oil-lard-milk margarine studied is superior to butter in vitamin D content."

The action of testis hormone in correcting changes induced in the rat prostate and seminal vesicles by vitamin B deficiency or partial inanition, CARL R. MOORE and L. T. SAMUELS. *Am. J. Physiol.* **96,** No. 2 (1931, Feb. 1) pp. 278–288.

"Testes of male rats kept upon a diet deficient in the antineuritic fraction of vitamine B, or on insufficient diets containing an excess of B, were found to consist of normal seminiferous tubules in active spermatogenesis but the reproductive accessories (prostate gland and seminal vesicles) were castrate in type. Daily injections of either testes hormone, or anterior hypophysis hormone from pregnancy urine, into animals with castrate accessories caused the castrate condition to be replaced by the normal state within a period of ten days. We interpret these findings in terms of a more general theory advanced elsewhere in the following manner: Partial starvation induced by diets deficient in vitamine B, or insufficient diets rich in B, leads to a poor nutritive state in the organism which affects the hypophysis. The inhibition of hypophysial secretion leads to a lowered amount of the sex stimulating hormone available in the organism. In the absence of this stimulating substance the testes fail to continue their endocrine function and castrate accessories are present. Injections of testis hormone stimulate the accessories directly, whereas injections of hypophysis hormone stimulate the intact testes to secrete their hormone which then acts upon the accessories. There is evidence to show that under the conditions of the experiment the endocrine function of the testis is disturbed, whereas spermatogenetic function continues."

Dietary requirements for fertility and lactation. XXIII. The specific effect of vitamin B on lactation, BARNETT SURE and DOROTHY J. WALKER. *J. Biol. Chem.* **91,** No. 1 (1931, April) pp. 69–75.

Previous experiments having shown that vitamin B influenced markedly the food consumption of lactating female rats, it was the purpose of the present experiment to determine whether vitamin B played any primary part in lactation. Lactating animals were given a diet adequate except for vitamin B. Their litter mates were kept on a completely adequate diet restricted in amount to that eaten by the animals on vitamin B deficient ration. The authors conclude that "vitamin B, in addition to influencing food consumption, plays a specific rôle in lactation, unrelated to the plane of nutrition."—E. P. D.

The unsaponifiable lipids of lettuce. I. CAROTENE, H.S. OLCOVICH and H. A. MATTILL. *J. Biol. Chem.* **91,** No. 1 (1931, April) pp. 105–117.

The findings of a study of the proper-

ties of carotene are thus summarized by the authors:

"1. Crystalline carotene was obtained from the unsaponifiable lipids of lettuce. 2. Carotene crystallizes in the hexagonal system. 3. The fading of the crystals at elevated temperature is not an oxidation. 4. Carotene solutions may be bleached by heat, ultra-violet light, and by the presence of autoxidizable fats. 5. The presence of hydroquinone delays for a variable length of time the bleaching of carotene solutions by any of the above mechanisms. 6. Hydroquinone protects ethyl laureate solutions of carotene apparently indefinitely. Such solutions are satisfactory for physiological studies. 7. In autoxidizable mixtures, carotene is an active prooxidant. This property is unique in a hydrocarbon. 8. The physiological activity of carotene as vitamin A is confirmed; under widely differing conditions, the growth induced by feeding carotene seems to be directly proportional to the amount fed; 0.005 mg. permits an increment of 3 to 5 gm. in the weight of rats deprived of vitamin A."—E. P. D.

The association of vitamin A with greenness in plant tissue. III. Vitamin A content of asparagus grown under light of various qualities, JOHN W. CRIST and MARIE DYE. *J. Biol. Chem.* **91**, No. 1 (1931, April) pp. 127–134.

From experiments continuing those reported in *J. Biol. Chem.* **81**, 525 (1929), the authors draw the following conclusions: "The experimental evidence presented here gives added support to the conception that in some manner or other the elaboration of vitamin A in the plant is connected with the development of the chlorophyll pigment. For the first time, a reasonably successful attempt to establish this association on a quantitative basis has been made. It seems reasonable to conclude that within the restrictions of the two variables expressed by some non-linear relationship chlorophyll content is a limiting factor on vitamin A synthesis in vegetative parts (in this case the stem tip) of the plant. This gives point to the contention of Schertz that further progress in a knowledge of vitamin A may depend much upon the industry and the success of the biochemists and the plant physiologists in their efforts to solve the mysteries of chlorophyll and its functions."—E. P. D.

Composition of bone. X. Mechanism of healing in low phosphorus rickets, BENJAMIN KRAMER, M. J. SHEAR, and JAC SIEGEL. *J. Biol. Chem.* **91**, No. 1 (1931, April) pp. 271–290.

Rats were fed diets suitable for the production of low-phosphorus rickets in which the Ca x P product in the serum was always 30 or less when calcification ceased. Healing was induced on about the third day by cod-liver oil or viosterol, within 24 hours by fasting, and within about 12 hours by the addition of phosphate to the diet. Healing was noted histologically in each case and a rise in the Ca x P product was always observed before the appearance of new calcification.—E. P. D.

Composition of bone. XI. Binding of calcium ions by serum, M. J. SHEAR and M. M. OFFNER. *J. Biol. Chem.* **91**, No. 1 (1931, April) pp. 291–305.

"1. Serum was dialyzed against 3 per cent aqueous NaCl solution to remove most of the serum calcium and then against 15 per cent aqueous urea solution to remove most of the NaCl.

"2. The serum solutions so obtained were almost Ca-free and had a low specific conductance. By evaporation through collodion bags the protein con-

tent was increased to any desired extent up to the point of solidification.

"3. Conductivity titrations of such serum solutions with 0.025 N and 0.05 N $CaCl_2$ gave values below the calculated minimum values, thus furnishing additional evidence for the binding of calcium ions by serum."—E. P. D.

Concerning the use of cottonseed meal in the diet of the rat, WILLIS D. GALLUP. *J. Biol. Chem.* **91**, No. 1 (1931, April) pp. 387–394.

"The unhealthy condition and retarded growth of rats fed for 120 days upon diets which contained 40 per cent cottonseed meal were shown to be due to the presence in the meal of appreciable amounts of physiologically active gossypol. The effects of the gossypol became apparent during the last 60 days of the experiment. Improvement in the growth and well being of animals fed upon cottonseed meal diets was brought about in two ways: (1) by administering inorganic iron ($FeSO_4 \cdot 7H_2O$) which is efficacious against gossypol injury, and (2) by replacing the ordinary meal in the diet with an autoclaved product which contains little if any active gossypol."—E. P. D.

Vitamin studies. XVIII. The biological assay of food materials for vitamin A as influenced by yeast from various sources, H. E. HONEYWELL, R. A. DUTCHER, and J. O. ELY. *J. Nut.* **3**, No. 5 (1931, March) pp. 491–501.

A search for an explanation of the divergent results in assays of vitamin A has led to the study of the variability of yeasts used as a source of the vitamin B complex. Results indicate that yeast made by the same manufacturer may or may not contain traces of vitamin A, and this fact may account for the inability at times to produce ophthalmic symptoms. The possibility is also presented that vitamin A may consist of several factors, one possessing antiophthalmic properties and tending to preserve normality of other epithelial tissues and the other having the growth-stimulating properties usually ascribed to vitamin A.

It is shown that the vitamin A response using the curative method will vary according to the richness of the yeast used as a source of vitamin B complex, and it is recommended that laboratory workers make periodic test of new supplies of yeast to prevent this variable from affecting vitamin A technic.—G. M. D.

Growth and reproduction on milk diets, J. WADDELL, H. STEENBOCK, and E. B. HART. *J. Nut.* **4**, No. 1 (1931, May) pp. 53–65.

The growth and reproduction of rats on a diet of cows' milk supplemented with copper and with copper and iron is reported. On a diet of whole milk and copper a chronic anemia due to low iron was observed and growth and reproduction were impaired. With whole milk, iron, and copper, both growth and reproduction were also subnormal but no anemia was observed. Subnormal growth and poor rearing of young was due to poor mammary secretion. Since no specific evidence of low vitamin B is observed these results may be due to the low caloric diet. By means of daily vaginal smears, it was established that subnormal reproduction was due to late sexual maturity and very poor ovulation. Preliminary experiments indicate that small amounts of either manganese or iodine or both greatly improves the ovulation rhythm in females on the milk, copper, and iron diet. No evidence of lack

of vitamin E was noted in females on these milk diets.—G. M. D.

Male sterility on milk diets, J. WADDELL. *J. Nut.* **4**, No. 1 (1931, May) pp. 67–77.

The effect on male rats of the milk, iron, and copper diets described in the preceding paper is discussed. In males total sterility is found, characterized by complete absence of germinal epithelium, great loss in amount of testicular tissue, and pronounced edema. That the effect on the testis was intensified by the action of ferric chloride is shown by the fact that symptoms were more severe than on the whole milk and copper diet. Since the reproduction failed in a manner entirely different from that found in vitamin E deficiency, these results are not considered due to an insufficiency of this vitamin.—G. M. D.

Vitamin E in iron treated rations, J. WADDELL and H. STEENBOCK. *J. Nut.* **4**, No. 1 (1931, May) pp. 79–93.

Further experiments in the effects of iron-treated stock rations have proved that the ration induces sterility in males as well as females. The iron treatment, it is concluded, brings about the formation of an antivitamin, found extractable by ether, which actively opposes vitamin E. In the presence of this substance females are unable to utilize high storage reserves of vitamin E and only after being returned to a basal diet for 4 to 6 weeks do these reserves again become available. It is suggested that this antivitamin may be stored in the tissues for that period or else bring about some change in the reproductive apparatus of the female that prevents it from nourishing implanted fetuses.—G. M. D.

HOME ECONOMICS EDUCATION

Vom Aufbau unserer Fortbildungsschulen. [Development of our continuation schools.] ANNA WEINBERGER. *Blätter für Lebenswirtschaft und Lebensunterricht* **4**, No. 1 (1931) pp. 2–6.

The general purpose of Austrian continuation (or vocational) schools for girls is discussed by a woman of long experience in such work. The pupils are mainly girls employed in industry or agriculture. The program covers two years, and time spent in school must be equivalent to at least 200 hours a year. The main subjects of instruction are religion, language, personal regimen (Lebenspflegeunterricht) civics, household accounts, folk-singing, and dancing. Practical instruction is given in cooking, child care, and sewing. The program of a school in Mödling shows that under personal regimen come in the first year health education; food values, preparation, and selection; table manners; family relationships; recreation; and advancement. In the second year come clothing and its care; the house and its care, with special attention to the kitchen and working equipment; the elements of child training; and more advanced cookery.

Die Heimküche. [The home kitchen.] *Blätter für Lebenswirtschaft und Lebensunterricht* **4**, No. 1 (1931) pp. 16–21.

The unit kitchens installed for food preparation work in the vocational school for girls at Krefelder (Germany) are here described and illustrated, and a detailed list is given of the equipment, the total cost of which is about RM 900 ($225).

Moral education methods in the United States. *Bull. Intern. Bur. Educ.* **5**, No. 1 (1931, Jan.) pp. 6–10.

The committee reporting to the Moral Education Congress the differences in methods used for moral education in the new and the old world, concludes that, since American ethics are essentially social, the American school attaches more importance to intimate and scientific knowledge of the pupil's character, aims at practical rather than theoretical morality, would enlist the cooperation of the home in discovering the cause of difficulties, is interested in listing desired qualities and establishing practical plans for acquiring them at the most favorable age, and struggles more persistently to secure the child's own cooperation in improving his character. Amiability, cooperation, cheerfulness, and optimism are ranked higher than in the old world; and intellectual honesty, modesty, disinterestedness, and sincerity towards oneself, lower.

Domestic studies and reorganized schools, Report of the National Council. *Educ.* [London] **57**, No. 1476 (1931, April 24) p. 480.

Because possible changes in the national English scheme of education and reorganization of the public school system as outlined in the Hadow report may secure wider recognition of the importance of domestic science and housecraft as school subjects, the National Council for Domestic Studies has drawn up a memorandum on the subject. It asks that needlework be given to junior school girls (under 11 years of age). For senior girls (11 to 14 years) it asks that 5 hours weekly for 2 years be devoted to domestic subjects, exclusive of needlework and vocational training; these domestic subjects to include cookery, laundrywork, housewifery, home management, and personal hygiene. For an optional third year, it suggests first aid, home nursing,

child care, physiology, hygiene, and gardening. Close correlation with English, science, and drawing is urged. Recommendations are also made concerning improvements in equipment and staff.

Après le Congres de Liège. [After the Liège Congress], PAUL DE VUYST. *Educ. Familiale* **28,** No. 4 (1931, April) pp. 194–212.

The progress of the international movement for familial education, stimulated by the Congress of 1930 (J. HOME ECON. **22,** 1000, 1930), is here outlined by a prominent member of the International Commission for Familial Education. The officers of the latter, meeting in Paris in January, 1931, recommended that its representatives from different nations organize committees in their respective countries to promote character development through the family, working so far as possible through existing agencies. Also that the next Congress avoid "repetition of empiricisms and formulate in the light of scientific experiment a technic or technics for the use of parents, beginning with those most frequently called for." Brief notes are given of developments in 8 European countries and the United States.

Illinois readjusts home management project, KATHRYN VAN AIKEN BURNS. *Extension Service Rev.* **2,** No. 5, (1931, May) p. 70.

Evidence of general managerial improvement bearing directly on new standards of excellence for farm homes has resulted from the presentation of the whole picture of family living through discussion of a few well worded questions as an approach to home management rather than as formerly emphasizing routine physical practices.

Buying clothing studied in California. *Extension Service Rev.* **2,** No. 5 (1931, May) p. 78.

Better buying studies in which 14 counties in California recently participated and as a result of which more than two thousand families have reported improved practices are here editorially described. Records were kept for several months on cost, labor, laundry, and wearing qualities of ready-made and homemade house dresses and children's clothing, as well as various makes of underwear and hosiery. The conclusions were that most types of underwear could be purchased more satisfactorily than made with the possible exception of costume slips.

Die Kojenlehrkuche. [The school unit-kitchen]. *Hauswirtschaftliche Jahr.* **4,** No. 2 (1931, May) pp. 54–57.

Along with a discussion of the advantages of home-like working places for members of cookery classes, a German architect here gives an illustrated description of the unusual arrangement worked out in the Institute for Vocational Training (Berufspädagogisches Institut) at Frankfurt-am-Main. It is semicircular in plan and is located in a large room with a curving outer wall, the upper part of which consists chiefly of windows. Under these are the "cabin kitchens," separated from one another by glass partitions perhaps five feet high, and each cabin containing a gas range of household size with separate gas meter, a sink, a work table, and carefully planned storage space for utensils and supplies in constant use. The teacher's desk stands on a semicircular platform against the inner wall, allowing a clear view of all the cabins. The desk itself is circular and built into it is a cooking unit for demonstrations. Between the platform

and the cabins is a semicircular table at which the students can do desk work and supplies are given out. One electric and also one coal range are installed so that students may become familiar with their use, also a variety of special appliances and labor-saving devices. A well-arranged pass cupboard connects with the adjoining dining room. The increased efficiency of the installation is considered to offset its relatively high cost.

Rural domestic economy, E. H. PRATT, *Home & Country* **13,** No. 5 (1931, May) pp. 232–234.

The program entitled "The Practical Education of Women for Rural Life" recommended by the National Federation of Women's Institutes to the Ministry of Agriculture in 1928 [also called the Denman report] called for recognition of rural domestic economy as one of the branches of agricultural education and provision for it by traveling instruction, residential courses, and special training for instructresses. Small beginnings in several counties warrant the hope that technical training may soon be organized and graded on the lines already successful in the United States and Belgium and that as a result country housekeeping may be made more pleasurable and more profitable.

The Hadow report and the domestic subjects teacher, MARGARET C. PEPPER. *Housecraft* **4,** No. 1 (1931, Jan.) pp. 4–6; No. 2 (1931, Feb.) pp. 33–34, 39.

A consultative committee on education of the adolescent was recently delegated under the chairmanship of Sir Henry Hadow to study the problem of the education of boys and girls over 11 years of age. This committee recommends that each child receive 4 years of secondary education and that at the age of 11 he be normally transferred from the primary school to that form of post-primary school which best suits his capacity and taste. This necessitates the organization of new types of secondary schools not offering the conventional university preparation but a minimum of essential general education and opportunity for training for his future work and for the wise use of leisure. Practical instruction in domestic subjects will be included in these new schools for all girls. The first two years will give the training necessary to enable each girl to "do" for herself and others efficiently and wisely. In the third and fourth years she may join a "bias" group where she will gain better self-expression, constructive thinking, and skill directed toward needle trades, domestic service, cooking, laundry work, or housewifery. The domestic subjects teacher in such schools will need preparation for teaching not only her special courses, but also elementary science, hygiene, English, and history as needed and for cooperating actively with the "games mistress." Since the transfer of the pupil is to depend arbitrarily upon age, she must be skillful enough professionally to adjust her program to classes of unequal intelligence and ability. This plan should establish the domestic subjects and their teachers on an equal footing with others.

Training colleges of domestic subjects in Great Britain and Ireland, MRS. D. M. NORTHCROFT, *Housecraft* **4,** (1931).

I. The London training colleges, No. 1, Jan., pp. 7–11;

II. West England and Wales, No. 2, Feb., pp. 35–39;

III. Liverpool and Manchester, No. 3, March, pp. 58–60;

IV. New Castle and Leeds, No. 4, April, pp. 84–87;

V. Edinburgh, Glasgow and Aberdeen, No. 5, May, pp. 111–115, 110;

VI. Dublin and Belfast, No. 6, June pp. 134–137.

A series of descriptive papers.

How to combine the work of the domestic subjects teacher with the activities of rural life, KATE BARRATT. *Housecraft* **4,** No. 5, (1931, May) pp. 107–110.

In line with the Denman report on "The Practical Education of Women for Rural Life" and the increasing interest in agricultural economics, the possible relation of the work of the domestic subjects teacher to rural women is discussed. Farm institutes at present support training centers where dairying and poultry-keeping with some general agriculture and horticulture are offered to rural women over 16 years of age. The author hopes that the expected reorganization of schools in country districts with its extension of training in practical subjects will include better training in domestic subjects, emphasizing the close relation of successful management of the rural home to such domestic subjects as catering, budgeting, cookery (especially of vegetables), hygiene, and child welfare, and such associated handicrafts as gardening, landscaping, preserving, and manufacturing of home products into salable goods.

The economic status of teachers college and university faculties, FREDERICK L. WHITNEY and ARTHUR K. GOODMAN. *J. Educ. Research* **23,** No. 4 (1931, April) pp. 308–318.

A comparison of the returns from a comprehensive questionnaire on social and economic status sent to the faculty of 18 teachers colleges and Peixotto's findings at the University of California leads to the following conclusions: The general income and cost of maintaining desired standards of living are not conducive to large families among members of the teaching profession on the college and university level; members who have attained the better positions are well beyond middle age and even then are not earning enough money to assure a comfortable, carefree old age; salaries are low as compared with the income of other professions; median expenditure exceeds median income and expenses cannot be easily met; best educational results can be obtained only when the salaries of the teachers are sufficient for a good standard of living and provision for future need.

The mental ability of adults in school, ALONZO G. GRACE. *J. Educ. Research* **23,** No. 4 (1931, April) pp. 321–324.

This study of the distribution of mental abilities (as measured by 6 standard ability tests) of adults registered in courses under the direction of the Cleveland Board of Education suggests that it is socially profitable to offer to adults as much education of the kind they are able to assimilate as a community can afford, provided that the interest of adults in continuing their education is genuine and comes from a felt need.

Proceedings of the 44th annual convention of the Association of Land-Grant Colleges and Universities held at Washington, D. C., November 17–19, 1930.

Papers from the section on home economics are:

Methods of improving our teaching technique, MARGARET JUSTIN, pp. 381–382;

Cost studies—comparing home economics with other fields, FLORENCE HARRISON, pp. 383–387;

Report of the committee on orientation course for home economics freshmen, MARGARET FEDDE, pp. 387–390;

Effective placement, organization, and method of teaching family relationships, ABBY L. MARLATT, pp. 390–396;

The part of home economics in the adult education program, ADA HART ARLITT, pp. 400–403;

Organization of a program of research, SYBIL L. SMITH, pp. 413–421.

Home economics without a laboratory, GRETCHEN M. SMITZER and GRACE G. REEVES. *Teachers' Lesson Unit Series No. 3. Bur. Publ., Teachers Coll., Columbia Univ.* 1931, pp. 32.

A detailed description of procedures followed by a seventh-grade class which planned and gave a Hallowe'en party for a fifth-grade class and of a unit dealing with modern child care which grew out of a desire of the same seventh-grade class to give a second party to a group of first-grade children, shows how sound educational policy may function in the classroom. The series to which the publication belongs is being developed in the Horace Mann School and edited by Dr. William A. McCall, in the hope that this outlet for voluntary contributions from teachers throughout the country may promote an exchange of helpful ideas and discoveries among teachers in all grades and fields of subject matter.

Illuminating engineering in home economics courses, ELOISE DAVISON. *Trans. Illuminating Eng. Soc.* **26,** No. 5 (1931, May) pp. 484–488 (Reprint No. 17).

Scientific information regarding illumination should be included in college courses in home economics if homemakers are to appreciate the relation of household lighting to eyesight conservation. Cooperation between educational leaders and illumination engineers would make possible the incorporation of pertinent material into special units of physics, physiology, psychology, household administration, household engineering, and interior decoration courses.

Das Heim und die Welt. [The home and the world.] ELISABETH ROTTEN. *Werdende Zietalter* **10**, No. 4 (1931, April) pp. 141–146.

In this introduction to an issue devoted chiefly to the relation of the home and the homemaker to wider interests and implications of this to education, the editor calls attention to two conflicting tendencies—one, to urge upon women a return to the narrower conception of their rôle as homemakers, out of which they were driven by war-time conditions; the other, to discount the value of homemaking and to emphasize the greater social contribution which women can make in other fields of activity. The real way out, she feels, is to lessen the burden of household work by more efficient houses, equipment, and management, and to promote better general understanding of the less material values of home life, including its relation to wider social and civic questions. The importance of educating men and boys to the significance of the home and its problems is emphasized and several articles from the JOURNAL OF HOME ECONOMICS are cited to show how this is attempted in the United States.

Hauswirtschaft als Gestaltungsaufgabe. [Homemaking as an educative activity], ERNA MEYER. *Werdende Zeitalter* **10,** No. 4, (1931, April) pp. 147–150.

Recent interest in rationalization in the household has tended to emphasize the economic aspect of homemaking and to overlook the fact that efficiency in the household is merely a means to an end, namely the full personal development of the members of the family. Changes in material conditions present unprecedented difficulties to homemakers and mothers; social and ethical changes, yet greater ones. The necessity of providing

the homemaker with the requisite knowledge and skills is to be taken for granted as essential preparation for her responsibility for the creative development of her family.

Das Kind in der Hausarbeit. [The child in the work of the home.] MARIA MONTESSORI. *Werdende Zeitalter* **10,** No. 4 (1931, April) pp. 159–161.

Observation of children in the "children's houses" of Montessori schools has shown that their ways of work are different from those of adults, as also are the motives leading to activity. A child, for example, sees a spot on a table, starts to rub it off, becomes pleased with the performance of the act of polishing, and continues it until his desire for it is satisfied, regardless of whether or not the spot is removed. Because his movements are not coordinated, a child works slowly and uncertainly, and his satisfaction in the activity comes from performing it, not from what it accomplishes. The adult, on the other hand, is concerned to accomplish his purpose as quickly and easily as possible. It is difficult for him to realize that to help a child to do this may be to thwart him in the more important acquisition of muscular control. These facts must be borne in mind in assigning household tasks to little children. In the children's house, where the youngsters do all sorts of housework, the leader says nothing and organizes nothing, but remains the silent, self-effacing helper.

Die Hausdienstlehre in Bern. [Training for household service in Berne.] MARIE LUISE WILD. *Werdende Zeitalter* **10,** No. 4 (1931, April) pp. 169–171.

During the ten years' existence of the Bernese Household Service Commission, whose function is to promote and supervise training for such service, the number of girls in training has increased from six to over six hundred, the majority of them persons of more than average intelligence. Attendance at special evening classes is combined with a system of closely controlled apprentice work under carefully selected homemakers in small private homes, interesting features of which are a preliminary period of work before either party commits herself to the two-year contract, conferences between the supervisors and the homemakers, voluntary classes for the latter, and the development of a sense of pride in both homemakers and girls for the successful outcome of the apprenticeship.

K. K. and H. W. A.

INSTITUTION ECONOMICS

To reduce expenses—find the leaks, WILLIAM E. BARTON. *Bldgs. & Bldg. Management* **31,** No. 9 (1931, May 18) pp. 64–68.

It is suggested that leaks in apartment house expenses may be reduced by an analysis and understanding of such expenditures as wages, water, gas, electricity, fuel, telephone, repairs, decorating, supplies, uniforms, shades and awnings, sundries, commissions, advertising, legal advice, audit, insurance, taxes, mortgage interest and amortization, and improvements. Of these, wages is the largest single item and represents about 10 per cent of the rent income.

Vacation schedule: Reid Memorial Hospital, Richmond, Indiana. *Hosp. Management* **31,** No. 4 (1931, April) p. 46.

Superintendent, assistant superintendent, instructress, surgical supervisor, laboratory and X-ray technician, dietitian, historian, house mother, housekeeper, bookkeeper, and telephone operator are here reported as entitled to one month's vacation a year. House assistant, sewing woman, and cooks receive two weeks. Other dietary help, cleaning women, and porters receive one week the first year and thereafter, ten days.

How do your food costs compare with these hospitals? *Hosp. Management* **31,** No. 4 (1931, April) p. 68.

A statistical table showing per capita food costs in 12 hospitals.

Miss Jones seeks information about refrigeration, MATTHEW O. FOLEY. *Hosp. Management* **31,** No. 5 (1931 May) pp. 22–24.

It is recommended that refrigerators be located in the line of travel between the receiving rooms and place where supplies are used or prepared. Economy in operation comes from proper original installation, short piping from machine to refrigerator, and as few doors to every refrigerator as possible. Since the daily requirement of ice per patient averages 6 to 8 pounds, the writer considers it advantageous for most hospitals to make their own ice.

When income alone provides the funds for refitting an apartment hotel, E. A. HAMMESFAHR. *Hotel Management, Section I* **19,** No. 4 (1931, April) pp. 266–269.

Mr. Collins, manager of the East End Park Hotel, Chicago, suggests practical and inexpensive ways of refurnishing living rooms and bedrooms to inject more individuality and intimacy into the rooms.

The steps required to open—and later to close—a summer resort hotel, CRETE M. CHANDLER. *Hotel Management, Section I* **19,** No. 4 (1931, April) pp. 280–283.

An analysis of the duties involved in opening and closing a summer hotel. Employment policies are included in the discussion.

Housekeeping department meetings that make for better maintenance, JEAN DAHL. *Hotel Management, Section I* **19,** No. 4 (1931, April) pp. 289–293.

Departmental meetings are described as affording opportunities to discuss informally inspection procedures, points likely to be overlooked by maids, new problems, house policies, and management. Inspection charts are given for halls, public spaces, bathrooms, and for general heavy cleaning.

Making the proposed new apartment hotel's mistakes "on paper," WARD H. KENTNOR. *Hotel Management, Section I* **19,** No. 5 (1931, May) pp. 362–364.

The author holds that the survey made to precede building should analyze the immediate district, its probable future, and that of the surrounding residential district. If the results warrant the undertaking, the type of apartment hotel best suited to the location should be determined by a study of the number and types of vacancies in competitive buildings in the neighborhood, the types of residential units most in demand, and competitive rates.

If you would have better employees—be sure to set them a good example, R. B. DAVILLE. *Hotel Management, Section I* **19,** No. 5 (1931, May) pp. 370–373.

The responsibilities of the executive and department heads are analyzed, showing the advantages of a pocket manual for each employee, periodic "roll calls," personal contact with all members of the staff, and monthly bulletins. Health of employees is essential to successful operation and may be safeguarded by physical examination at time of application, and by periodical examinations with medical and dental care at special rates.

Claridge, Gem Hotel, Atlantic City. *Hotel M'thly* **39,** No. 457 (1931, April) pp. 30–55.

Plans showing the layout of the different floors and the working department are given and discussed, with numerous pictures of furnishings and equipment.

Inventory—china, glassware, silverware, linen, LOUIS ERGAS. *Hotel M'thly* **39,** No. 457 (1931, April) pp. 58–61.

The method of accounting suggested in this article charges expense accounts and sets up reserves monthly to cover costs of replacement and proportion of equipment in use. Detailed discussion is given of the 5 points on which the system is based: frequent physical inventories, a record of additional purchases and shortages, monthly charges to operations and credits to reserves, inventory valuation, and periodic adjustment of profit and loss.

Electric club's home atop Chicago, *Hotel M'thly* **39,** No. 457 (1931, April) pp. 62–75.

The discussion and pictures in this article are of particular interest for their Old English theme of decoration and the all-electric kitchen equipment.

The consulting dietitian and her value to the hospital, FAIRFAX T. PROUDFIT. *Modern Hosp.* **36,** No. 5 (1931, May) pp. 128, 130+.

A description of the work of the consulting dietitian as it relates to the patient and the physician.

The relation of the dietitian to the purchasing agent. *Modern Hosp.* **36,** No. 5 (1931, May) p. 134.

An outline of two systems of purchasing in vogue in the average hospital and the relation of the dietitian to the purchasing agent in each.

Can I make a success of the restaurant business? RAY FLING. *Restaurant Management* **28,** No. 4 (1931, April) pp. 221–223.

A booklet intended for distribution by local restaurant associations which includes a discussion of the most important elements in the success of a restaurant business. These are presented in questions and cover such items as analysis of location, essential budget items, service, surroundings, and expansion.

Patrons who formerly complained of noise now come to us for quiet. *Restaurant Management* **28,** No. 5 (1931, May) pp. 316–317.

The noise problem in the cafeteria here described was solved by a study of causes and the institution of changes to eliminate them. For instance: aluminum trays were replaced with non-metal trays, dishwashing facilities were rearranged, linoleum was substituted for wood in table tops, chairs were equipped with glides, ceilings of dining and dishwashing rooms were covered with sound absorbing material. The elimination of excessive noise has resulted in increased patronage.

The summer camp menu. *School Feeding* **20,** No. 1 (1931, April) pp. 3, 16.

Advice on food planning, grocery specifications, and typical menus are given.

New York University follows best principles of commercial operation, WALDO HUTCHINSON. *School Feeding* **20,** No. 1 (1931, April) pp. 4–5, 17.

Three thousand are fed daily in the two cafeterias described in this article, which includes discussion of equipment, staff, organization of management, and menus and their relative costs.

Meeting campus appetites at University of Chicago, JEAN SEARCY. *School Feeding* **20,** No. 2 (1931, May) pp. 3–5.

The author describes how 4200 students, including those in elementary and high schools allied with the university, are fed daily at the University of Chicago in dormitories, cafeterias, clubhouse, and coffee shop. Heads of the various units have the title of supervisor and are members of the faculty. Educational possibilities are emphasized. Popular menus are given.

This cafeteria a training school, JONAS HOWARD. *School Feeding* **20,** No. 2 (1931, May) pp. 8, 17.

The County Vocational School at Newark, New Jersey, offers boys a two-year course in cafeteria and restaurant business, and uses the cafeteria here described as the training center. All phases of quantity food preparation are included, and it is expected that the training will extend to regular restaurant service as well.

What needs most to be done by the hospital dietitian? MARY DE GARMO BRYAN. *Trained Nurse & Hosp. Rev.* **86,** No. 5 (1931, May) pp. 679–680.

A brief discussion of recent developments in administration and teaching in hospital dietary departments.

Foods delectable for the hospital menu, HORTENSE ELLIOTT and HAZEL BELKNAP. *Western Hosp. Rev.* **17,** No. 2 (1931, April) p. 48.

This article advocates supplanting the main course by an entrée to add variety and interest to the menu during spring and summer and gives numerous suggestions for combinations and methods of preparation.

M. DE G. B. and G. M. A.

MISCELLANY

Home Economics Education. In the first editorial paragraph of the May issue, the *Journal of Education* pays high tribute to the value of home economics education, using as its text the twelve years' progress reported in "Vocational Education in Home Economics," a recent bulletin from the Federal Board for Vocational Education.

Sixth World Conference on New Education. The time of this conference has been set as the first two weeks in August, 1932; the place will be somewhere in France, probably in Nice. The theme of discussion will be "Social Changes and Education."

"Win—Don't Lose in Buying." Pertinent suggestions for women who would like to know how to buy more for their money are found in a pamphlet prepared by the standardization committee of the Ohio Home Economics Association. General principles are illustrated by a practical study of bath towels. Copies may be purchased for 20 cents each from the chairman, Miss Rosamond C. Cook, University of Cincinnati.

A. M. A. Committee on Foods and the Food Industry. Opinions of food manufacturers regarding the A. M. A.'s program for certifying the general quality as well as the healthfulness of food products are summarized in *The Business Week* for June 24. Questions raised are whether the Association is not exceeding the natural boundaries of its activities in attempting to assume police and regulatory powers over the country's largest industry; whether it has realized the responsibility and magnitude of the task; whether it has weighed the consequences of inadequate staffing and financing or has considered the possible disastrous effect on smaller manufacturers, wholesalers, and present methods of distribution. Opinion within the industry seems divided.

Swedish Consumer Cooperatives. Under the caption "Sweden Cuts the Cost of Living" Marquis W. Child describes successful consumer Swedish cooperative associations in the *New Republic* for June 24.

International Standardization of Vitamins. Dr. E. V. McCollum and Dr. Harry Steenbock, it was reported by *Science*, are to be United States delegates to a meeting called by the League of Nations to advise on methods for the standardization of vitamins.

Internationalizing the Egg. Fairly uniform standards for quality in eggs are now recognized by 18 countries, says the United States Bureau of Agricultural Economics, all but the United States, Germany, and the United Kingdom applying them to export trade. In general, the standards for shell eggs are now expressed in terms of air cells, condition of shells, yolks, whites, and germs.

New Apartment Houses. Several novel types of apartment houses designed to provide sunshine and air, are pictured in the July issue of *Hygeia*.

Research in Fish Products. A new research laboratory has been established by the United States Bureau of Fisheries at Gloucester, Massachusetts. According to press reports, its studies will include freezing and its effect on nutritive value, standard methods for smoking

fish, problems of storage, and other factors in the production and handling of fish products.

Bureau of Agricultural Engineering. This new bureau in the United States Department of Agriculture, which is in effect an offshoot from the former Bureau of Public Roads, began functioning on July 1. Its chief, S. H. McCrory, announced that the modernization of farm homes would be a major project of the new bureau, and that problems of refrigeration, water supply, and sanitation are also to be studied.

A Grecian Lamp. A little Grecian lamp presented to an American superintendent of nurses who worked in Greece after the Smyrna disaster of 1922 is pictured and described in the *Red Cross Courier* for July, and shows its close kinship to the Betty lamp of early American days which has been adopted as the symbol of the American Home Economics Association.

The Newbery Medal. This medal, awarded annually for the year's most distinguished contribution to children's literature, went this year to Elizabeth Coatsworth for her book "The Cat Who Went to Heaven," the story of an artist in Japan.

Child Labor and the White House Conference. "Child Labor Recommendations of the White House Conference on Child Health and Protection" are quoted and briefly discussed in the *Monthly Labor Review* for June, 1931.

International Convention on Night Work for Women. How the proposed modifications in the Washington convention which prohibits the employment of women between 10 p.m. and 5 a.m. were voted down at the June International Labor Conference in Geneva, is described in the *Life and Labor Bulletin* for July. These modifications were advocated by the Open Door International, a women's organization including the National Women's Party in the United States. Letters of opposition were sent to Geneva by the American Federation of Labor and eleven women's organizations from this country, among them the American Home Economics Association. Defeat of the modifications was due to the votes of labor delegates.

Public Health Nursing. Beginning with the July issue the name of the monthly magazine of the National Organization for Public Health Nursing has been changed from *The Public Health Nurse* to *Public Health Nursing*. The editors are Dorothy Deming and Ruth Gilbert, 450 Seventh Avenue, New York City.

Survey of Southern Appalachian Region. An economic and social survey of this region was started this summer with the cooperation of the Bureau of Agricultural Economics, the Bureau of Home Economics, and the Forest Service of the United States Department of Agriculture, the United States Office of Education, and several state experiment stations.

Educational Publications. The "Record of Current Educational Publications" for the first quarter of 1931 appeared in June as United States Department of the Interior, Office of Education Bulletin (1931) No. 9, a pamphlet of 106 pages. It is the first of the proposed series in which the current literature is reviewed and the more important contributions listed and briefly

annotated by specialists in 13 major fields of education.

Archæological Expedition to St. Lawrence Island. Otto William Geist, whose accounts of Eskimo life have appeared in the JOURNAL, left Alaska in May for two years' archæological work on St. Lawrence Island under a permit issued to the Alaska Agricultural College by the United States Department of the Interior.

Education Directory: 1931. This useful finding list of principal state school officers, county superintendents, university and college presidents, and educational organizations and periodicals has appeared as Bulletin 1931, No. 1, of the United States Office of Education and may be purchased from the Superintendent of Documents, Washington, D. C., at 35 cents a copy.

A Hundred Years of a Rural School. The history of an Ohio country school, founded in 1831, and now enlarged into a modern, consolidated school, as brought together and illustrated in the *Farmer's Wife* for July, is interesting both in itself and as typical of many others.

Rural Schools. According to press reports of the first commencement ceremonies at the new consolidated school buildings which Owen D. Young has presented to his birthplace, Van Hornesville, New York, he holds that good rural schools are fundamental to the success of our whole educational system and that rural life in the twentieth century is destined to be truly exhilarating.

"Timely Cookery." "Zeitgemässes Kochen" is the title of a pamphlet in which Frau Hildegard Margis, a popular German writer on home economics topics, introduces her readers to practical electric cookery. A series of inexpensive dinner menus is given, each accompanied by statements of type and wattage of apparatus, materials required, number of persons served, total time of preparation, and order of operations, the whole ingeniously arranged for quick reference. Incidentally, the menus appear to be typical of middle-class German diet.

Labels on Packaged Meats. As an extension of the beef grading and stamping service of the United States Bureau of Agricultural Economics, packaged meats for the retail trade may now be labeled with a United States Department of Agriculture certificate of quality. In New York City, 85 stores have reported that under this system of labeling retail sales have increased from 20 to 40 per cent.

Is the Public Market a Good Civic Investment? This question is partially answered by Caroline B. Sherman of the Bureau of Agricultural Economics in a popular illustrated leaflet of this title issued by the United States Department of Agriculture.

Household Management Institute in Czechoslovakia. The establishment of an institute for the study of domestic questions in the Food Ministry of Czechoslovakia is announced in the *Bulletin of the International Management Institute* for May. It is to be administered by a committee of 12, including representatives from various ministries, from the Housewives' Central Organization, from educational and research institutions, and from public utilities in Prague. Special attention is to be given to the standardization of household articles.

OUR CONTRIBUTORS

ANNA J. HAINES was in social welfare work in Philadelphia between graduation from Bryn Mawr College and her first trip to Russia, where she went for the American Friends Service Committee, 1917 to 1919. She was there again from 1920 to 1921 as famine relief worker and, after three years of nursing study at the Philadelphia General Hospital, was there a third time as teacher of nursing. She has just resigned as secretary of the Boston Health League to return to Russia for an indefinite period of health work.

MARTHA VAN RENSSELAER was noted among August contributors.

MRS. LAURA HARMAJA holds a master's degree from the Helsinki University, and also has studied in Germany, devoting herself principally to the relations between national and home economics. She has taught economics and home economics and written several books, including textbooks on national economy in which she has cooperated with her husband. She is on the editorial committee of *Kotiliesi*, the leading Finnish periodical for home interests and economics.

MRS. MABELLE SPERRY EHLERS is a graduate of Kansas State Agricultural College and the University of Chicago, specializing in institution economics. She has had varied teaching and institutional experiences and since 1929 has been head of the institution department in the home economics division at Michigan State College.

MRS. NORMA KIDD GREEN, a University of Nebraska graduate and a former Y. W. C. A. secretary and student adviser, considers that her most valuable training and experience have been gained from her present position—that of homemaker for the four little Greens and their daddy.

ANNA BELLE ROBINSON, a graduate and master from the University of Illinois, has been in charge of its teacher training since 1921. MRS. MILDRED LOVELESS SKINNER taught in elementary schools for several years before her course at Kansas State Agricultural College. Since her graduation she has been in charge of home economics in the junior and senior high schools of Marion, whose 285 pupils come from both town and rural homes. ELIZABETH FORREST has done her undergraduate and graduate work at the University of Minnesota, and has taught in several Wisconsin high schools.

JOY ELMER MORGAN, a Nebraskan by birth and training, was for a time in library work, including army service during and after the war. Since 1920 he has been director of the division of publications and editor of the *Journal of the National Education Association*.

MORSE SALISBURY, a native of Kansas and trained at her State Agricultural College, had editorial, journalistic, and teaching experience in various universities before he became chief of the radio service in the United States Department of Agriculture. He is in charge of the daily National and the Western Farm and Home Hours, which include weekly home economics programs, and of the syndicate broadcasting service

of the Department which features daily "housekeepers chats" through 157 cooperating stations.

ALICE L. EDWARDS, executive secretary of the American Home Economics Association, hardly needs an introduction to JOURNAL readers.

JENNIE I. ROWNTREE was a contributor in June.

FLORENCE BROWN SHERBON is not only an A.M. and M.D. of the University of Iowa, but a graduate nurse and mother of twin daughters. She has been special agent for the United States Children's Bureau, chief of the child hygiene division of the Kansas State Board of Health, and for the past 10 years has been professor of child care and health and family at the University of Kansas.

MARION E. BROOKOVER sandwiched high school teaching between her graduate and undergraduate work at Kansas State Agricultural College. Since 1929 she has been head of home economics at Hutchinson Junior College. MARTHA S. PITTMAN, also a graduate of Kansas State Agricultural College, holds advanced degrees from Columbia University and the University of Chicago. Since 1922 she has been head of the department of food economics and nutrition at Kansas State Agricultural College.